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ABSTRACT

Designed for community students interested in learning about psychology as a field of study, this module offers group and individual activities to involve the beginning student in research, experimentation and discussion. Unit 1, "What Is Psychology?," includes the use of animals in psychology, ethics, the history of psychology, an overview of five major approaches today, and material specific to studying psychology in Australia. Unit 2, "Research Methods," gives the student an introduction to the scientific method and other research methods. Unit 3, "States of Consciousness," covers sleep, hypnosis, and drugs. Unit 4, "Memory," deals with stages of memory, remembering, forgetting, and improving memory. Unit 5, "Learning," covers classical conditioning, phobias, operant conditioning, punishment, and cognitive learning. Unit 6, "Personality," introduces major personality theories and personality testing. Unit 7, "Intelligence," covers issues related to intelligence, including mental retardation, insanity, genius, and IQ. Unit 8, "Developmental Psychology," introduces concepts of age-related behavior, attachment theory, and major theories of social and cognitive development. Unit 9, "Psychopathology," introduces the major mental disorders. This material is designed to coordinate with the CGEA GCO at levels 3-4 in Australia. It is recommended that supporting references, including a basic text in psychology, be available. A brief teacher's guide is included. (EMK)

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Introduction to Psychology

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Adult Education in the Community

Gordon Institute of TAFE

Introduction to Psychology

Adult Education in
the Community

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of TAFE

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Unit 1 — What is Psychology?

Psychology is the scientific study of human behaviour. It comes from two Greek words:

- **PSYCHE** which means ‘mind’, and
- **LOGOS** which means ‘the study of’

The Greek letter **PSI** is often used as a shorthand symbol for the word **psychology**.

Ψ

Why is it that we need to study behaviour in a scientific way? Some people say that psychology is really only common sense and we do not need the methods of science to study humans who are quite unpredictable in their behaviour.

But can we really draw conclusions about how humans behave using common sense?

The following icons will indicate activities for you to complete:

Ψ an individual activity

ΨΨ a group activity.

Activity 1.

Are the following statements 'True' or 'False'? Tick ☑ the appropriate box.	True	False
• Schizophrenics suffer from split personality	☐	☐
• Women have a natural mothering instinct	☐	☐
• After you have taught an animal a new trick you must reward after every correct response	☐	☐
• A low degree of arousal is best when you are running the 100 metres	☐	☐
• Psychologists and Psychiatrists have similar training	☐	☐
• The most effective way of remembering a shopping list is to recite it over and over	☐	☐
• People with very high IQs are often vague and do not have good social skills	☐	☐
• Under hypnosis, accurate memories are more likely to be recalled	☐	☐
• Personality can be assessed accurately using modern personality tests	☐	☐
• Opposites attract one another	☐	☐

Ask your teacher to check all the answers to your quiz. How well did you guess?

Perhaps knowing that common sense can often be misleading in the study of psychology is one reason we rely on scientific methods for gathering information or data. If we relied purely on information gained from our own observations and experiences we would still think the world was flat because it looks that way to the naked eye. Gathering information which is free of bias from a range of sources helps to establish facts which can be relied on in psychology. Psychologists and researchers gather data from experiments which they control very precisely in order to achieve the four goals of this science.

The four goals of psychology are to:

1. describe
2. understand
3. predict, and
4. control behaviour.

Why does Psychology Need to Do This?

Have you ever noticed that when an accident happens a large crowd gathers and very rarely does anyone offer to help but instead stand around watching and waiting for somebody else to do something.

Psychologists often noticed this kind of behaviour and made a study of it. They called this particular behaviour 'bystander apathy'. It happens because:

- people do not feel competent to assist,
- fear doing the wrong thing,
- do not want to get involved, and
- fear they might be blamed in case anything goes wrong.

And yet none of us would have difficulty in calling an ambulance, a tow truck or the police if someone took charge at the scene and asked us to help.

Because psychologists now have a theory about crowd behaviour at an accident they can help to predict what happens and therefore warn people to assist. It is:

- being able to **describe** the behaviour,
- **understanding** why it happens,
- being able to **predict** what will happen in similar circumstances, and therefore
- being able to **control** the situation,

which Psychologists aim for in their profession.

These skills help us to understand the behaviour of others in many situations. Anyone who deals with people in their work or life will need the basic skills of psychology.

Can you imagine how the police, teachers, nurses and social workers would need psychology? Let's try another Activity.

Activity 2.

Get into groups of four students and discuss three scenarios where being able to predict and control behaviour would be an advantage at work.

Report back to the group on your findings and make a list of your suggestions below.

Scenario 1 ______________________________

____

Findings ______________________________

____

____

____

Scenario 2 ______________________________

____

Findings ______________________________

____

____

____

Scenario 3 ______________________________

____

Findings ______________________________

____

____

____

Animals in Psychology

Besides studying humans, psychologists often use animals in their studies. Pavlov's dog, Skinner's pigeons and Harlow's monkeys all added greatly to our knowledge about behaviour under certain circumstances. Why is it that psychologists use animals for experiments instead of humans?

There are a number of advantages in using animals:

The nervous system of higher order mammals such as chimps, dogs and rats are very similar in structure and function to a human nervous system. Therefore we can presume that humans will react similarly.

Rats and mice reproduce very quickly and long term effects over many generations can be observed. Most long term studies of humans over more than three generations out-live the researcher!

Most animals can be successfully comfortably caged in a laboratory. Would you like to be part of such an experiment? We cannot treat humans in the same way as we do laboratory animals because it is not ethical.

Rats and mice are cheap and can be bred easily for such experiments.

Animals can behave in similar ways to humans but are not as complex, therefore we can learn things from them about the building blocks of human behaviour.

Ethics in Psychology

Ethics in psychology are guidelines which ensure that no psychologist will mistreat an animal or subject during any experiment. Animals are to be treated humanely, housed comfortably and not subjected to undue stress or pain. Human subjects are not allowed to be deceived unnecessarily and must consent to their participation. Ethics committees approve all experiments in Universities to ensure that strict guidelines are adhered to.

It is interesting to consider that many past and even famous experiments in pschology could not be repeated under today's ethical guidelines as the subjects were not treated properly. However, despite this, we learned a great deal about psychology from Harlow's deprived monkeys and about how 'Little Albert' learned rat phobia from John B Watson's efforts. More sophisticated procedures today ensure that scientific gain does not put subjects through pain.

Activity 3.

In this study of psychology you will be asking people to participate in activities from time to time. For instance, do you think you should knowingly tell people lies to achieve a result?

Should your families have to participate if they don't want to?

Should you always tell them the nature of the experiment even if you don't want to at the start in case it spoils the experiment?

Draw up a charter of ethical guidelines which may be appropriate this situation in the space below.

Ethical Guidelines for Psychology Classes

History of Psychology

Compared to other sciences, psychology is a recent addition. It grew out of philosophy and has gradually, since the late 1800's, assumed its own methods and theories. Some of the most famous people have been listed below with a brief statement of their contributions.

1879	**Wilhelm Wundt** started his own experimental Laboratory in Leipzig, Germany, to study conscious experience. He was interested in how the body reacted to various stimuli in regard to vision, taste, touch, hearing, reaction times, memory, feelings, time perception and many others. This study was known as 'introspection' **Edward Titchener** took Wundt's theories to America where they became known as Structuralism.
1890	**William James** published the first book for universities and colleges called 'Principles of Psychology'. He was influenced by Charles Darwin about natural selection and wanted to study how learning helped us to adapt to our environment.
1895	**Sigmund Freud**, a Viennese Doctor, published his first studies based on his own experiences. His theories, about the basis of human behaviour, suggest that it is influenced by unconscious thoughts and desires and motivated by either sex or aggression. Freud began his therapy of **psychoanalysis** to explore hidden motives for behaviour.
1906	**Ivan Pavlov** began his study of learning or conditioning which gave new ideas to psychology
1913	**John B Watson** in the USA, adds to the theories of **Behaviourism** started by Pavlov.
1912	**Max Wertheimer** and his colleagues in Germany propose the **Gestalt** view of Psychology which suggests that perception is based on thinking about whole ideas or concepts and not the individual parts, eg we hear a melody not dozens of individual notes.
1914	**Carl Jung** breaks his association with Freud and forms his own theories.
1913	onwards sees the **Behaviorist** view of Psychology as the most influential school of thought.
1950's	The **Cognitive** school of thought suggests that learning memory and thinking are the way the brain processes information. Much influenced by the discovery of computers and their workings.
1960's	another view of psychology known as the **Humanistic** view states that people have free will and can make choices about their lives. **Carl Rogers** and **Abraham Maslow** were leaders in this view.

Psychology Today

All of the people and movements mentioned previously have contributed to our modern knowledge of psychology. Psychologists today seldom choose one particular point of view such as Freud's or a Behaviorist view to solve all human problems. They have found that being able to select from many views is a better way to solve the various problems they meet in their working lives. We call this an 'eclectic' view of psychology and that means they use elements which suit a particular situation or client.

There are 5 major approaches used today in psychology.

1. **Psychodynamic Approach**

   This is an updated Freudian approach which uses psychoanalysis as a major form of therapy and views early experience as influencing later behaviours.

2. **Behaviorist Approach**

   This view says that behaviour is changed by reinforcing desirable behaviours with reward and punishment. We can also learn behaviour by watching and copying others.

3. **Humanistic Approach**

   This view based on Rogers' Client Centred therapy, views the person as being capable of solving problems within a positive client/therapist relationship. It suggests that we have a choice about how to behave and should work towards being the person we would like to become.

4. **Biopsychological Approach**

   This biological view of behaviour suggests that most behaviours have underlying biological causes, such as genetics, hormones and disease.

5. **Cognitive Approach**

   This approach assumes that the brain is an information processing organ which is involved in learning, memory storage and thinking. Any behaviour can be altered by changing the way you think about it.

Activity 4.

Case Study — Tony is an aggressive bully at school who hits other children when the frustrations mount up inside him.

There could be at least 5 possible explanations of Tony's behaviour. Discuss these with the person next to you before you decide.

Psychodynamic (P), Behaviorist (B), Humanistic (H), Biopsychological (BP) or Cognitive (C) approaches

Match the correct school of thought with the following statements?
Place a **P**, **B**, **H**, **BP** or **C** in the appropriate box.

P, B, H, BP or C

a) Tony has low self esteem and needs to develop alternative activities which will make him feel better about himself. ☐

b) Tony's early childhood was probably marked by physical and emotional abuse from his father and he is now acting out his frustration and aggression on others. ☐

c) Tony needs to think of more appropriate ways to behave instead of solving his problems violently. ☐

d) Tony has too much male hormone, testosterone in his body which makes him abnormally aggressive. ☐

e) Tony is copying his role model, Rambo, who seems to have success using violence to solve problems. ☐

So, You Want to be a Psychologist?

Psychology is an extremely popular subject in both VCE and at University because many people see it as a useful way of understanding human behaviour. It has any number of uses in any job which requires you to work with people and, let's face it, most jobs do. In order to be a psychologist there are many years of study ahead and, because of its popularity, there is a lot of competition for jobs in psychology. However, not all those who study it want to practice. Many students complete courses in teaching, engineering, computing, management, nursing, science and have a second major in psychology.

To enrol in first year psychology you do not have to complete VCE psychology, but those who do, find first year in psychology at University much easier. Your undergraduate degree needs to have at least one major in Psych or in some cases a double major.

You must be successful in your undergraduate degree to be considered for Honors a fourth year or an equivalent course in Post Graduate psychology. After successfully completing either one you can undertake a Masters by coursework at many different institutions. After two years supervised practice with another registered psychologist you may apply for registration to the Australian Psychological Society which is the governing body for all psychological practice in Australia.

You cannot practise as a psychologist without registration from the APS. When you have completed all eight years you may begin to work in a variety of settings such as:

- hospitals and psychiatric institutions
- private practices
- industry
- consulting firms
- social welfare agencies
- schools/universities/colleges
- police
- Government agencies (both State and Federal) and a variety of other settings

Australian Psychological Society Approved Specialities

1. Clinical psychology

These psychologists are involved in the treatment of emotional and behaviour problems and work with other health professionals in settings such as psychiatric institutions, research or private practice.

2. Clinical neuropsychologists

Involved in the treatment and diagnosis of people with psychiatric and neurological diseases and work in rehabilitation centres or hospitals.

3. Counselling psychologists

Work in a variety of settings such as schools, tertiary institutions, hospitals and the family court. They counsel people with emotional, social or relationship problems.

4. Community psychologists

Work with agencies to help with social problems such as homelessness, violence and other community issues.

5. Educational and developmental psychologists

Study the emotional, intellectual and social development of people. They may work to enhance learning opportunities for children, give career guidance and help teenagers cope with the problems of adolescence.

6. Forensic psychologists

Work with the legal system to provide expert opinion on such things as criminal behaviour. They may work with police, gaols or courts.

7. Organisational psychologists

Study the workplace behaviour of people in relation to such things as job satisfaction, motivation, productivity, and others. They may help to select personnel or design training and may work in a variety of settings such as government departments, private consultants and industry. Some Organisational Psychologists help to improve designs for better human functioning, such as control panels or store layout in big department stores.

8. Sports psychologists

Work with athletes and sportspeople to produce improvements in sporting achievement. They may work on motivation, skill improvement or overcoming injury.

Activity 5.

Clinical, Clinical Neurologist, Counselling, Community, Educational and Developmental, Forensic, Organisational, Sports — Which sort of psychologist would be involved with the following activities?

Designing dash boards or aeroplane cockpits for efficient use.

Helping rape and incest victims at a women's refuge.

Developing motivational strategies for sporting bodies.

Diagnosing neural damage and developing rehabilitation programs for accident victims.

Helping couples who are suffering marital unhappiness.

Studying children's development and normal patterns of behaviour.

Working with police to help solve criminal cases.

Working in a psychiatric institution to help patients solve behavioural problems.

This is by no means an exhaustive list and, as you can see, while there are many opportunities, the study is long and hard and the pay is not great to begin with. In order to see some of these opportunities, complete the activities on the next page.

Activity 6.

1. Look through the Saturday papers and find at least two adverts which require psychology as a discipline. (You may not find the jobs under 'Psychologist' so try looking under other headings such as counsellor, rehabilitation, research officer, staff development, welfare etc.)

Cut out the Ads and paste them in the space below. Try to find a range of jobs which illustrate the spread of psychology as a discipline. Note the qualifications required and the rates of pay .

In many Government jobs psychologists are classified into grades and as the person becomes more experienced the pay goes up accordingly.

2. Make a habit of reading anything which relates to psychology in the paper. You'll be surprised how many articles do. Keep a noticeboard section which is for current articles about psychology which may be interesting for the class to read.

·Jobs for Psychologists·

Psychology or Psychiatry?

Some people confuse psychiatrists with psychologists but there are a number of differences.

Psychologist	Psychiatrist
Undergraduate degree major in psychology 3 years + honours.	Undergraduate degree in Medicine 6 years.
2 years approved study, eg Masters degree + 2 years practice. Can now apply to practice as a psychologist.	Post graduate qualifications and working in a psychiatric hospital before being allowed to practise (at least 9 years.)
Uses talking therapies, tests and behaviour modification to solve problems	Prescribes drugs to help solve problems.
Works in a variety of settings.	Works in private practice or Psychiatric Institution.

As you can see, the difference in training is vast and it is much more costly to see a psychiatrist for an appointment than a psychologist. Medicare covers Psychiatric services but you have to be in a Health fund to get a rebate on Psychological services.

Some People Ask Which is Best?

The answer is that each one performs different functions and treats the problem differently. If you need drugs to help with the problem then a psychiatrist is the only one who can help as psychologists are not doctors who can prescribe drugs.

If you need someone who will listen and guide you to a satisfactory solution of a problem then a psychologist is probably a good choice. The Yellow pages are full of practising psychologists although those who are registered as therapists do not necessarily have Australian Psychological Association registration. When you need psychological help it is best to seek out the services of a trained registered professional who suits you.

After all, they are offering a service for which you pay and you are a consumer of this service so you have a perfect right to make a choice which feels best for you and solves your problem to your satisfaction.

Check your Understanding.

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Sigmund Freud practised the therapy of psychoanalysis.	☐	☐
b)	The four goals of psychology are to describe, understand, predict and control behaviour.	☐	☐
c)	Psychology is a very old science.	☐	☐
d)	Animal ethics state that animals can suffer any pain as long as humans can benefit.	☐	☐
e)	Wilhelm Wundt was a Behaviorist.	☐	☐
f)	The Humanistic approach was made popular by Carl Jung.	☐	☐
g)	Some psychologists work in psychiatric institutions with psychiatrists.	☐	☐
h)	The Cognitive school of psychology is connected with thinking, learning and memory.	☐	☐

Answer in a sentence.

2 What did Freud think motivated most behaviours?

3 What is one reason why animals are used in experiments?

4. Why do psychologists have to have ethical guidelines?

Fill in the gap with the correct term.

5. ______________________ is the name given to the phenomenon when people do not offer help at the scene of an accident.

6. Rats and mice ______________________ quickly so that long term studies are possible.

7. Max Wertheimer started the ______________________ school of psychology.

8. The ______________________ view says that we are governed by biological causes of behaviour.

9. An ______________________ view says we use ideas from all approaches in modern psychology.

10. An ______________________ psychologist carries out experiments on animals in a laboratory.

11. A ______________________ can prescribe medication to alter behaviour.

Unit 2 — Research Methods

In the first unit we looked at why it is advisable to study psychology in a scientific way instead of using common sense. Science relies on facts based on evidence gained from our senses through a variety of methods. These methods of gathering data have been proven over many years to be the most reliable and therefore we tend to use them. However not all methods of gathering data will fit every investigation and therefore different tools are employed for individual situations.

In this unit we will look at how the scientific method is used in psychology and some of the more common data gathering methods employed by psychologists.

The Scientific Method

Scientists rely on evidence which is said to be **empirical** or that which is gained from direct observation and from measurement. It is easy to make assumptions about human behaviour based on your own experience but in fact we have only limited experiences and if we wish to make generalisations about human behaviour we have to go further. Say, for example, we notice that a two year old throws tantrums and appears to have a very short fuse at the slightest provocation. Can we safely assume this is **normal** behaviour?

Based on one observation probably not, but scientists who observe common behaviours will often draw a tentative assumption which they will want to test. This tentative assumption is called an **hypothesis**. A hypothesis is a statement which we think of as a hunch or an educated guess about something we think may be true and which we set out to test. In our two year old example we may say that we have often observed two year olds with short fuses and it seems to be a common behaviour around this age but one which they seem to grow out of

Therefore our hypothesis might be 'that around the age of two, children exhibit signs of a low threshold for frustration'.

With this statement in mind we would probably devise a way of testing this statement in order to **support** it or **refute** it. In psychology it is almost impossible to **prove** any fact because there are nearly always exceptions. So we use the words support and refute to say that the majority of cases either agree or disagree with the hypothesis.

If 78% of the children you study are found to have 'short fuses' then we could say this was fairly typical behaviour of two year olds as over three quarters of them exhibit the behaviour and we would probably then go on to study what causes this phenomenon.

In fact temper tantrums are common in two year olds and the phrases 'terrible two's' or 'two year old temper tantrums' are well established in child psychology. The scientific method used in psychology has five elements which when used together yield reliable results which can be tested over again.

The five elements in scientific method are:

1. Observation
2. Define the problem
3. Propose a hypothesis
4. Gather evidence and test the hypothesis
5. Formulate a theory

In our former example all five were present in that we observed the tantrum behaviour of some two year olds, defined it as age related, proposed a hypothesis, tested by examining many two year old children to see whether they exhibited the behaviour and found 78% did. After discovering that two year old children are commonly affected, child development theory concludes this is typical behaviour for parents to expect.

All psychological theories have been developed after rigorous testing and experimentation which ensure they are as correct as science at the time allows them to be. Science is not always perfect because sometimes we do not always have precise enough technology or expertise to discover the real causes. For example, the splitting of the atom opened up vast new areas of physics when scientists perfected the technique. We do not understand the motivation of serial killers and therefore cannot make accurate predictions about who such people will be and what attributes they will have. Maybe one day we will find that the serial killing behaviour is linked to a vitamin deficiency. I doubt it, but the point is clear that not all problems are solved easily or correctly as often we lack the correct method or technology.

Activity 7.

Describe how you would go about forming a theory after observing that boys are more physically aggressive than girls at Kindergarten. What are the steps you would take to arrive at your theory. Work in small groups to discuss and make notes on this problem. Share your discussion with other class members.

Other Research Methods

The most commonly used methods of psychological research are:

- the case study
- observation
- surveys
- experiments.

Each has its own strengths and weaknesses and is used with a different purpose in mind.

1. Case studies

Case studies are extremely useful in situations where a naturally occurring event which is carefully documented by professionals, is published in journals and other scientific publications for others to read. The information, which would otherwise be unavailable, is often revealing and very insightful about the behaviour of 'one off' or rare cases.

There are many such cases in psychological literature which provide insights. Some of them you may have heard about or you may have seen films which depict their case. One famous case is that of 'Sybill' who was afflicted with multiple personality disorder. Sybil had a very repressed and abused childhood which produced a rare personality problem whereby the personality fragments into several quite different personalities who 'inhabit' the body of one individual personality. Sybill had 16 such characters ranging from outgoing women of the world to children who were shy and awkward. She had different ways of speaking and quite different personality characteristics for each of her personas. It took many years of psychotherapy by a dedicated psychiatrist, Flora Schreiber, to bring Sybill back to an integrated personality. Both a book and a film were written about Sybill's case and are well worth reading and seeing.

Other cases include 'Genie the Wild Child' and Phineas Gage. Genie was born to parents who kept her locked up in a back room for the first 13 years of her life. She was never allowed out and as a result of the deprivation did not learn to speak. She was discovered and taken into care and great efforts were made to help her regain lost ground but when government funding ran out she was institutionalised and abandoned by those who had taken an interest in the case initially. Genie's case provided great insights about the effects of deprivation on children's development.

Phineas Gage was a young man working on a railroad site in 1868 when a steel rod was accidentally blown into his forehead severing a large portion of his brain at the front. As a result of this injury, even though he recovered his health, his ability to control his emotions, especially angry outbursts, was severely impaired. From this case we learned that the frontal lobe of the brain controls emotion.

As you can see from these three cases we can gain a great deal of knowledge which would otherwise not have been available through experimentation. Ethically we cannot take people into a laboratory, and psychologically and sexually abuse them such as in Sybill's case, deprive them of human company and speech as in Genie's case, or force a steel rod through the forehead to see what happens. Such information is able to be studied if it happens naturally but we cannot use people as experimental subjects for our own curiosity and bring harm to them as a result.

Activity 8.

Collect news clippings about a case study over the next week and bring them to school to make a display on the notice board. The abused child Daniel Valerio was a recent famous case study.

Make a case study of one member of your family. Track events in their life which have been significant and write a brief report below which outlines these.

2. Observation

Observation is an important part of psychology in that all science starts out with observing events and changes which occur. As people, we keenly observe the behaviour of those around us all the time and we make inferences or guesses about what motivates those changes.

Activity 9.

Observe three behaviours of people in a public place. Describe exactly what you see and then try to guess what you think is motivating that behaviour. For example you may see someone looking away from someone talking at close range instead of looking them in the eye. What can you guess about this? You may think the person is shy, or in a world of their own, telling lies or perhaps frightened of the person they are with.

List three behaviours you have observed.

1. ____________________

2. ____________________

3. ____________________

Make a combined list on the board and discuss all the different possible explanations for the behaviours.

What does this tell you about the nature of human observation ?

There are many explanations for behaviour and it is no wonder that we seldom get it right intuitively. People can behave in ways which disguise their motives such as those who stare you in the face and tell you a bold lie or those who smile politely and hate you at the same time. Behaviour is not easily interpreted yet we think we are experts. We think we can all tell what someone else is thinking based purely on their outward behaviour which is not always a true guide to their innermost thoughts.

Scientists use a method of recording observations which is far less likely to involve interpretations and therefore more precise. For instance if they wanted to measure the amount of aggressive acts performed by boys as opposed to girls in a school playground, they would firstly construct a list of those acts which would typify aggression. This list may include striking the body of another child as in punching, smacking, shoving or hitting, kicking or spitting at another child and any other acts of aggression.

Trained observers would then choose a site where they could observe this behaviour in its natural environment without the children knowing they were being observed. A schoolyard at lunchtime would be one such setting. It is important for the observer to be hidden as their presence will create what are called observer effects. This is the change in behaviour brought about in subjects because of the presence of an observer. Most people behave differently when they feel they are being watched.

In the same respect, observers of animals notice much more natural behaviours when the animals are unaware of being observed. They are often more fearful or curious when the presence of a human is made known. Therefore observers take great pains to remain quiet and hidden to make more accurate observations.

Activity 10.

In pairs work out a list of three behaviours you would like to observe and a place you would like to observe these in. Use the tick chart in the next page which allows you space next to the behaviour to tick the number of occurrences. Choose an appropriate length of time to observe your subjects and stick to it, eg half an hour.

1.____

2.____

3.____

Location ____________________________________

Time allotted ________________________________

One fun observation is to observe cars at an intersection and to see what people do when they pull up at a red light. Many people take this time to play with their noses! What else might they do at a red light? One of you needs to mark the tick sheet while the other observes and reports the behaviour.

In recording the expected behaviours you might also like to make note of any unexpected behaviour which you can report back to class.

It may be fun to make a small graph of the frequency of these behaviours.

An example of how you might fill out the form is given below.

Location — Traffic lights at corner of Ryrie and La Trobe Terrace.	
Behaviour	*Frequency (observed over 20 mins)*
1. singing with car radio at red lights	𝍸 ||
Notes: Some people sang with great gusto and arm waving.	

Location ____

Behaviour	**Frequency** ***(observed over ______ mins)***
1. ________________	
2 ________________	
3. ________________	

Notes: ____

By simply recording the behaviour and not making inferences we can make better and more accurate judgements. Finding out why these behaviours occur probably needs another type of research method such as an interview or survey where you ask people why they do certain things. Guessing why is simply not appropriate!

Another problem associated with observations is that observers can often be biased because of the way they think. For instance, when a teacher labels a child as stupid, lazy or disruptive, it is hard for the teacher to imagine that same child as being intellectually gifted. Yet in fact many extremely bright children are so bored by normal classrooms that this is how they behave. Once we get a set in our minds about something it is hard to view it without observer bias interfering with our judgements. The method of listing and checking of the frequencies of behaviour can often eliminate observer bias as facts are gathered instead of assumptions.

3. Surveys

Surveys are a cheap and useful way of gathering a lot of information very quickly, however they are prone to a lot of pitfalls in the way they are constructed. The most useful way of learning about them is to construct a survey and test it out.

Activity 11.

Choose an issue of current interest to people and formulate six questions about it.

Ask people to state their opinions about the issue, for instance, are they for or against euthanasia? Are there particular circumstances where they think it is more appropriate and if so what are these? Perhaps you may like to ask them to tick an age and gender box to see if these make a difference to what people say they believe.

Q1. ____

Q2. ____

Q3. ____

Q4. ____

Q5. ____

Q6. ____

If you can have these questions typed and presented professionally it will add to the credibility of the research and you should tell participants that you are interested in their replies but the information will be anonymous and is being conducted to help students of psychology understand the nature of surveys.

Give each member of the class at least 6 sheets to distribute and bring back to class. Analyse the information to see if you can find significant numbers of people who agree or disagree with a point of view.

What problems did you encounter in giving the survey to people? Make a list of these in your book and discuss how you could have improved the survey.

Was the information difficult to tabulate or draw results and conclusions from? Were the questions clear or did you have to explain what they meant? Which sorts of questions drew the most fruitful responses? Which questions drew good responses which were impossible to categorise?

Usually open-ended questions asking for opinions are difficult to analyse whereas 'yes/no' questions are easy. However most 'yes/no' questions need a 'sometimes/ maybe' box to tick. If you list alternatives for people to choose such as 'Which of the following are most likely to make you buy this product; price, colour, fit, advertising or peer-pressure?' you will almost certainly need a box labelled 'other' for participants to give reasons you hadn't thought of.

Many questions force you to choose either 'this or that' when in fact you want neither. This leads subjects to make forced choices which do not accurately reflect their opinions and are therefore useless.

Lastly, to have any credibility a survey must not be biased. It would not be representative of the population to ask Catholic participants what they thought of euthanasia and then assume everyone thought the same way because not everyone's religious beliefs prohibit them in that way.

A survey on the benefits of school uniform would probably be quite valid if it were given to 10% of a school population provided half the sample were boys and half were girls and that proportional representation was given to each year level and that the names of the students were selected randomly for instance every tenth person on the roll. If you asked for volunteers you may be rushed by the pro or anti-uniform lobbyists and may end up with a biased answer

By sampling 10% in this manner we could safely say that the result was indicative of the answer we would have obtained if we had sampled everyone. By choosing the group carefully so that it is representative we don't need to test everyone and the result is still as reliable.

Problems encountered in giving and analysing the survey.

4. Experiments

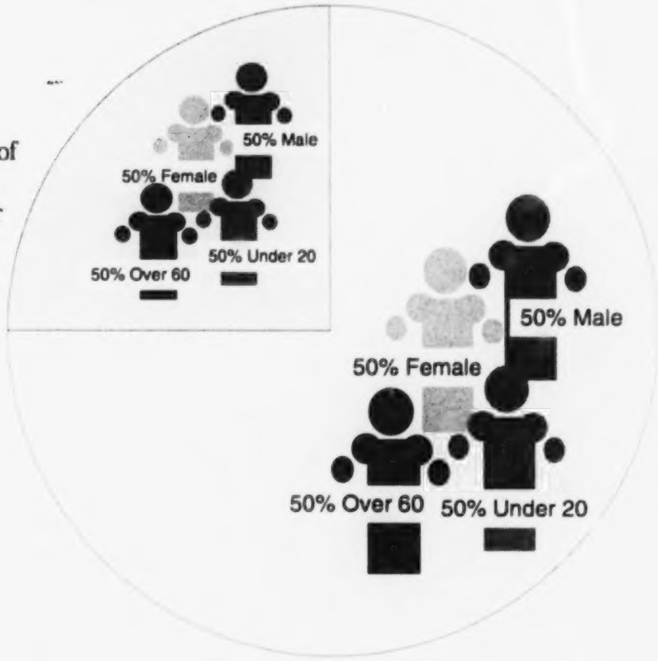
An experiment is undertaken to either support or refute a fact or a principle. It is what you do when you undertake to test the hypothesis in the scientific method. Not all aspects of psychology lend themselves to be tested in this way however and the result is only as good as the method employed. We can obtain an inaccurate finding as an outcome of a faulty test method or an unsuitable one.

There are many aspects to consider when setting up an experiment and failure to take any one of them into account may result in a wrong conclusion.

a) Choice Of Participants

Choosing participants to be involved in a study takes a lot of thought and careful planning. Subjects are either chosen at random or by stratified sample. Those chosen at random are chosen in a way so as to give anyone an equal chance at participation. For instance you can achieve this by choosing for example every 7th person in a phone book or every 4th person on the electoral roll. When a large group is chosen at random in this way it nearly always provides us with a group which will mirror society at large so that it becomes a subset of any population. In other words, a group which equally represents the whole population.

Population of 1,000 people



The subset of 250 people must mirror the whole population

On the other hand you may want to make sure the two groups participating in an experiment are equal in every way and therefore you would want to match them. You may need to take into account the age, educational achievement, cultural background and gender of participants and other characteristics as this may affect the result. For instance if you wanted to know whether memory was affected by ageing it is not much use contrasting a group of ageing university graduates with a group of high school dropouts as their intelligence levels may vary. It would be valid to test an equal numbers of males and females who had similar levels of education and health as well as similar ages.

b) Variables

There are three types of variables or factors which affect the experiment:

- independent,
- dependent, and
- confounding.

Independent variables — in an experiment are those factors which we expect will cause a change in behaviour and therefore make a difference. The experimenter presumes that a substance or a treatment given will alter subject's behaviour and they usually want to measure how much or in which way the behaviours change. Looking at the influence or effects of an independent variable is the basis of any experiment, ie how much smoking do you have to do before lung cancer occurs?

The dependent variable — (the outcome) is 'dependent' on the type of manipulating you carry out with the independent variable. The outcome of smoking, in this case cancer is the dependent variable in this case.

Independent variable = smoking

Dependent variable = lung cancer.

If we teach problem solving techniques to a small group and then present a problem to those who have been given the instruction and another group who haven't, we would expect the instructed group to outperform the others. For example, the independent variable of prior experience leads to the dependent variable of better performance.

Confounding variables — alter the result but not in the way we would expect. These variables are factors which will affect the outcome or result but for which we have not allowed. In other words we hadn't realised they would affect our result.

Activity 12.

Supposing we gave a memory test of 20 words to two groups of 20 students in a primary school and matched them for age, gender and IQ. It would seem that this would be a reasonable sample. What would happen if one of the groups knew how to visualise using a memory technique so that they were far better at remembering than the others? This confounding variable of prior experience could affect the outcome and ruin the experiment. How? Describe below.

Confounding variables are present in all but the most strictly controlled laboratory experiments and must be accounted for as they will often affect the result adversely without the researcher knowing the reason why.

Activity 13.

Pick which are the independent (I), confounding (C) and dependent (D) variables in the following scenarios.

Discuss your answers with the other class-members and see if you arrived at the same conclusions.

	I	C	D
a) Monkeys in one cage at the zoo are allowed to watch a human solve a toy puzzle whereas monkeys in another are not. Puzzles are then left in both cages and observers watch the result. Five of the observer monkeys were able to solve the same puzzle after one hour and two of the non observer group.			
b) 25 subjects in a class participated in a meditation relaxation activity. They took their pulses before and after the activity to see whether there was any difference. The result showed that there was lowering of between 10-60 beats per minute after the activity but in 5 cases there was no difference and one student's pulse rose by 10 beats. Is the result due purely to the independent variable?			
c) A researcher wanted to find out if playing soft music helped in putting babies to sleep. Sixteen babies were tested for a week to determine how long it took them to get to sleep. Soft music was played to them every night for the second week and the time taken to get to sleep was measured. The results showed that the music made no difference to the time taken to sleep.			

c) Effects of chance

The likelihood of certain things happening by chance alone is factored into some experiments. If you were studying a population of men who were smokers and comparing them with non-smokers for the incidence of lung cancer, you can bet that some of the non-smokers will contract cancer because of other factors such as diet, stress, genetics, environmental pollution and others. According to statistics it is likely that five out of every hundred subjects will have a result that is due to chance and not the independent variable you are working with in the experiment.

d) Comparing groups

Subjects are often allocated to either a control or an experimental group so that researchers can compare the effect of the independent variable on one group with the other. Suppose we wanted to know if drinks containing caffeine, (independent variable) a known stimulant, made reactions faster (dependent variable). We would probably begin by testing reaction times for the whole group and matching the groups so that there was a balance of ability. Perhaps the experimental group could be given 100mls of cola drink containing 10mgs of caffeine and the control group an identical looking and tasting cola drink containing no caffeine. After sufficient time lapse to let the effects of the caffeine work we would test both groups to see if there was a difference in their reactions. If we found there was a significant increase in the experimental group who got the caffeine we could say it made a difference because, compared to the control group, they were faster due to the effects of the stimulant drug caffeine.

In an experiment we treat the experimental group with the independent variable and measure the differences using the control group as a benchmark. We may pretend to give the control group the same treatment because problems can arise when you treat two groups differently.

Experimental Group	**Control Group**
Subjects chosen by a particular method, eg matching for age / sex / intelligence.	Subjects chosen in an identical way.
Given drink 10mls of caffeine.	Given drink which looks and tastes the same but without caffeine.
Differences in reaction time noted.	Differences in reaction noted.
Differences usually attributed to caffeine.	Differences attributed to placebo effect or confounding variables.

e) Problems

One problem which arises is known as placebo effect, whereby subjects knowing that something has a particular effect, experience that effect without necessarily ingesting the substance or having the treatment which makes a difference. Young people who are told they are drinking alcohol may often feel as if they are drunk even though they have had no alcohol. People who experience pain symptoms can often feel better if told by their doctor that a particular tablet will alleviate pain, even though it is a sugar coated tablet which contains no pain relieving substance. How can this happen?

Activity 14.

Have you ever noticed that your thinking can change the way you feel?

For instance, have you ever started to feel unwell after being told by several people that you don't look well?

Discuss instances in class where thinking has affected your feelings of well-being or mood.

There is plenty of research which confirms that thinking affects the way we feel both positively and negatively.

In our example above about caffeine and reaction times, all subjects would probably know that caffeine is a stimulant and therefore would perform with the expectation of more speed. By appearing to treat all subjects in the same way (ie all had a similar tasting looking drink) we could assume that any differences in performance in the experimental group could be attributed to caffeine alone. They would all be performing better because of placebo effect but those with the caffeine would be doing better still, due to its additional stimulant effect.

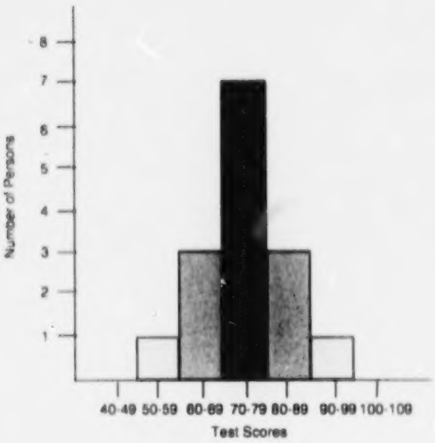
Another problem is that of subject and experimenter effects. Subjects can affect experiments in a host of ways in that they know too much, have prior experience you don't know about, guess the true nature of the experiment, lie about their answers or affect the outcome in other ways. Experimenters too can bias the results by the way they question subjects, treat subjects differently, give clues about who is getting the placebo and who is getting the real treatment or a variety of other ways.

Experimenters must always try to be sure that the result is due only to the independent variable and not some other factor. Imagine a situation where the experimenter, a female teacher, is instructing children in a classroom on a performance task. She wants to know who learns best. Perhaps the result shows that girls are able to take instruction better than boys because they produced a better product. It may also be that the teacher doesn't particularly like the boys and so spends longer with the girls instructing them more fully and that was the reason for the result (experimenter effect). Or it may be that boys are slower at developing the aural skills needed to take instruction and therefore cannot achieve by instruction alone (subject effect).

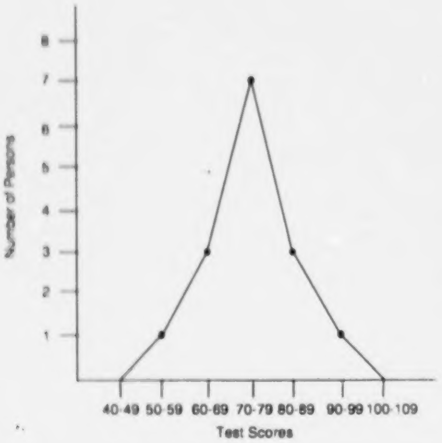
f) Results

In any experiment the results are the measurements or data gained. These are usually presented in the form of a graph, chart or table and the choice as to which is appropriate depends on the material. Generally the method which provides easy to read results at a glance is the one employed. Graphs can be either histograms (bar graphs) or polygons (line graphs). Other results can be presented as a pie chart diagram, or a simple table of figures.

Histogram



Polygon



g) Drawing a conclusion

When we draw conclusions about the results we have to be careful that we do not make extravagant claims or generalisations from the results. It may be true that 10mgs of caffeine may speed reaction time in catching an object from .9 to .5 of a second but it is not true that more caffeine will necessarily speed up more complicated physical activities.

Too much caffeine may have a detrimental effect on some activities causing you to become overstimulated and for your heart to race and mind become disoriented. We can only assume that this minimal amount of caffeine speeds up reaction time in this particular instance. The conclusion we draw should only state that in this instance or experiment, a particular independent variable affects behaviour to what degree and in which ways.

From these particular results we can form a theory about what happens to behaviour when you manipulate a specific independent variable. We can then say whether we have supported or refuted our initial prediction or hypothesis about what would happen to the behaviour.

Activity 15.

Conduct a simple experiment in class and see if you can identify all the components of the experimental method.

The aim of the experiment is to see whether drinking a cup of coffee stimulates the heart so that the pulse beats faster.

What would you expect your hypothesis to be? Devise a way of testing this so that you know the coffee is the reason the heart beats faster and not another reason.

Discuss the method you will use and how you will assign class members to their group.

Write down the steps you will go through in order to test your hypothesis so that everyone will get the same treatment. Find the results and analyse them in such a way that they reflect each group's average pulse rate. Compare these.

What did you find about the effects of caffeine on pulse rate? Are you positive these results were due only to the independent variable? What else could make the pulse rate rise to confound the result? Discuss this with the rest of the class.

Scientific Report On The Experiment

Introduction

Hypothesis

Method

1. subjects

2. materials

3. procedure

Results

Discussion

As you will now begin to understand the process of conducting research is painstaking and very specialised. As we said at the outset it does not always yield perfect results and can be affected by many factors.

The answer to achieving scientific facts lies in **replication** which is the reason why scientists publish their research findings and summarise their research in scientific journals. This is so that other experts may try the same experiment to see if they achieve the same results.

If experts all over the world find similar results when the same piece of research is conducted then we can safely assume that they have established a fact. Scientific work is always open to the scrutiny and criticism of one's colleagues engaged in similar work so we may assume that scientists will be truthful and careful about their work because their academic reputations rely on it. However, in rare cases even scientific experts will make claims about findings they cannot substantiate or publish research which is flawed.

Nothing is flawless and psychology is no exception!

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	The scientific method is based on empirical research.	☐	☐
b)	We either prove or disprove a hypothesis in any experiment.	☐	☐
c)	A case study is used to test a group of people.	☐	☐
d)	A Theory is proposed on the basis of facts which are established by the scientific method.	☐	☐
e)	Observations are the best way to gather data without errors.	☐	☐
f)	Naturalistic observations are carried out in a laboratory.	☐	☐
g)	Surveys are easy to construct and yield reliable information.	☐	☐
h)	Experiments are the most scientific way to gather data.	☐	☐

Answer in a sentence.

2. Define independent, dependent and confounding variables.

3. What are two disadvantages in using observations to gather data?

____

____

____

____

____

4. What do we have to consider the effects of chance in any experiments?

____

____

____

____

____

Fill in the correct terms in the sentences.

5. In an experiment you manipulate the ________________ variable in order to see if it affects the ________________ variable.

6. The ________________ group is the one receiving the treatment, whereas the ________________ group does not.

7. ________________ effect is when changes in behaviour are due to a psychological effect.

8. ________________ and ________________ effects are when the participants and organisers affect the outcomes of an experiment.

9. ________________ evidence is that gained from the senses.

10. Case studies are the results of rare studies which could not otherwise be conducted because ________________ prevents us from conducting such research.

11. When subjects know you are watching them and behave accordingly, we call this an ________________ effect.

Unit 3 — States of Consciousness

In psychology we talk about the changing nature of **conscious awareness**. When we feel alert, aware and awake we feel quite different from when we are asleep, tired, ill or maybe even under the influence of alcohol or drugs. There are various levels of awareness on which we operate and it seems that our conscious awareness is ever changing according to our state or mood.

Conscious awareness is the mood state which is typical of being awake, alert and aware of ourselves and our surroundings. We have a meaningful perception of who we are, what we are doing and where we are.

If you have ever had the misfortune to be ill and in a fevered state your awareness often becomes a mix of dreaming and waking and quite often you are confused, not knowing what time it is, what day it is or how long you have been asleep and awake. In other words, your conscious awareness has diminished.

Perhaps a more dramatic change in conscious awareness takes place with someone in a coma. They can be unable to talk or move but some patients when they come out of the coma say they were aware of voices with them in their hospital room during the period they were ill. Perhaps even at this time, a low level of consciousness operates.

Activity 16.

Perhaps you could plot each of the following states of consciousness in their correct order on the continuum.

(Drunk, Asleep, Daydreaming, Coma, Your present state, Death)

From this activity and the varying states we have plotted you can see that one state is quite different from the other in the quality and pattern of mental functioning.

Eight types of changes occur with regard to the following characteristics:

Characteristic	in an altered state of consciousness
Perceptions	Our perceptions are often quite different
Memory	Our ability to remember is often not as good
Sense of time	Time appears to pass quickly or very slowly
Emotions	Our emotions are not matched appropriately to the situation
Thoughts	Our thoughts are often coherent or muddled
Feelings	Our feelings do not always appear appropriate
Self control	We exert less control over our behaviour than normal
Suggestibility	We are more likely to do what others suggest even if we don't agree

There are many examples where consciousness is altered in life and perhaps you have been in one of the following states. Have you ever had a fever or hallucination, been hypnotised, had an unexplained religious experience, lost sleep for a prolonged period, meditated, been under the influence of alcohol or drugs, had an operation with anaesthetic, had a sensory overload with loud music and bright lights, been part of a large crowd at a sporting occasion or demonstration where the emotions are highly charged, been bored to death, or even had a near death experience?

If so, these unusual happenings are likely to affect the way you think and feel at the time.

Activity 17.

With one consciousness altering experience in mind, can you describe the way your mental functioning changed in relation to the ways listed below?

Perceptions

Memory

Sense of time

Emotions

Thoughts

Feelings

Self control

Suggestibility

Discuss your findings with the rest of the class in relation to your awareness of how you change when your conscious awareness is altered.

We will discuss altered states on consciousness in relation to three common states, those being sleep, hypnosis and drugs.

Sleep

Sleep is something we all need but not in the same proportion. Some people need a lot of sleep and others need very little.

Activity 18.

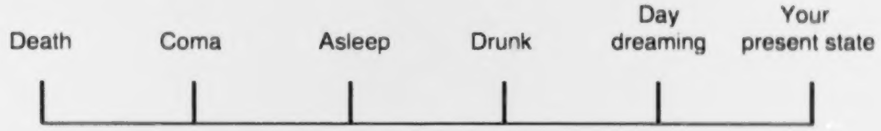
Take a quick class survey of the number of hours sleep people feel they really need to feel good the next day. Add these up and find out the average number of hours the class needs. It will probably be around 8 hours which is a typical average.

By comparison find out what people actually get on most nights and see if there is a difference in what they need and what they get.

Can you describe how it feels to be asleep? Are you aware of what is going on around you? Are you alert? Are you aware of who you are and where you are ?

Where on the continuum did you place sleep in relation to the other states?

Chances are you placed it like this:



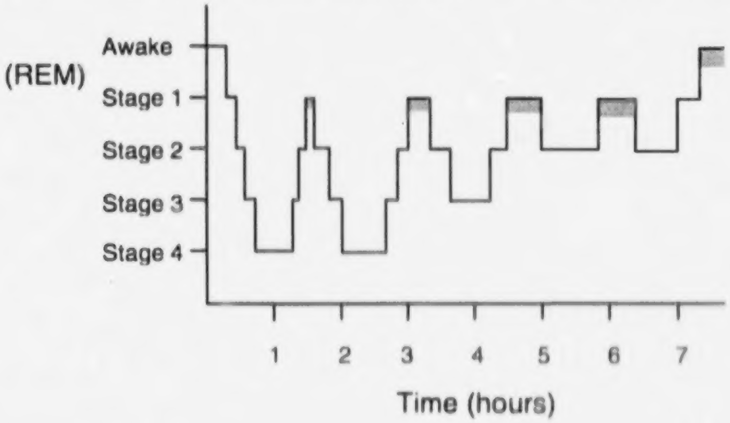
Even though we think of sleep as a time when we are **unconscious** there is still a degree of conscious awareness operating otherwise we would not wake up to strange noises or turn over when we are uncomfortable, too hot or too cold. It is as though the body uses sleep to slow down the operations of the body to a low ebb but leaves on the automatic pilot in case of emergencies. Sleep is probably the lowest level of conscious awareness everyone experiences as part of normal function. Other low levels are far more serious, such as coma or being unconscious after a blow to the head.

Even in sleep there are varying levels of conscious awareness and you have all probably experienced the difference between nightmares and dreams, deep and light dozing sleep. A brief explanation of what goes on in sleep will help you to understand how conscious awareness varies like a roller coaster all night long.

In the average night of eight hours a typical person would go through four stages.

Stages in a typical night's sleep.

(the shaded areas show the periods of dreaming — REM — sleep as they occur)



A typical night's sleep showing time spent in each stage. As the night progresses the REM period increases.

1. **Stage One**

   Stage one sleep is a light dozing state from which people are easily woken. Their brain waves are slightly different from the waking state and the heart rate and breathing slow down.

2. **Stage Two**

   During this stage the person enters a deeper sleep and the brain waves are characterised by little bursts of electrical activity called spindles which signify real sleep has occurred. At this stage if you wake the person they will say that they have been asleep.

3. Stage Three

During this stage the person falls into a deeper sleep as large slow waves called delta waves start to take over the brain's electrical activity. The body's vital functions slow even further and the person is hard to rouse from sleep.

4. Stage Four

This is the deepest sleep where slow delta waves characterise the brain's pattern. People in this stage are more likely to **sleep walk** and **sleep talk** and children are known to have very frightening dreams known as **night terrors**. Night terrors are vivid and sufferers are liable to scream out and be physically active. They are not nightmares which are far different in character. This deep sleep is when the body takes care of growth and repair tasks .

R.E.M. Sleep

After about an hour going through stages one to four, the sleeper travels back through stages three, two and back to Stage One. Instead of dozing, this becomes what is known as REM, or **rapid eye movement sleep.** You will see dogs engaging in rapid eye movements and babies spend nearly half their sleeping time in REM. What exactly is going on?

REM sleep is the part of sleep where we engage in dreams. For the most part during REM dreams the body is paralysed but it can twitch. Even though your dream may be about running away from someone you are actually lying very still in bed. Your heart is often racing, your blood pressure elevates and your breathing is irregular.

Although we do not know the exact reason for REM dreaming, it appears to be the most important part of sleep, as without REM sleep and dreams, a person can suffer consequences such as irritability, fatigue and inability to concentrate the day after. Prolonged deprivation of REM can cause people to have hallucinations but after a full night's sleep there do not appear to be any lasting effects.

Periods of high stress often result in an increase of REM sleep and increased exercise can lengthen REM sleep. REM dreaming is vivid and story like and **nightmares** or bad REM dreams can often occur in response to anxieties in real life. In REM nightmares you are paralysed unlike night terrors where people often thrash around and scream out. Night terrors are often not remembered but nightmares are quite frequently recalled.

Activity 19.

Discuss with the rest of the class any experiences you may have of sleepwalking and sleeptalking which often occur together, run in families and are often outgrown by the time you reach puberty.

Discuss night terrors in comparison to nightmares. Seeing children with night terrors is probably the only experience you will recall as most people do not remember them.

Not everyone can enjoy a full night of refreshing sleep and many suffer from insomnia for a variety of reasons

Insomnia

Insomnia is not being able to get to sleep at the appropriate time, frequently caused by:

1. **Stimulants**

   Many people drink too much coffee, or other substances which contain caffeine. Cigarettes containe nicotine and tea contains tannin both of which are stimulants. Many cold tablets contain known stimulants which help clear blocked nasal passages. All of these substances before bed will impair sleep.

2. **Alcohol**

Even though alcohol is a sedative substance it impairs the quality of sleep so that you do not eel refreshed on waking.

3. **Stress**

Many people think about worrying problems when they get to bed instead of acting on them during the day.

4. **Irregularity Of Sleep**

   Many people who work shifts, who cat nap during the day or who do not go to bed at a regular time cannot sleep at night. Sleep cycles are dependent on regular patterns and can get out of synchronisation.

Activity 20.

There are various other reasons why sleep is poor. Perhaps you can jot down a few below for discussion.

As you can no doubt see, there is a variety in the conscious awareness we experience during sleep. Some parts of sleep are very deep and some are extremely light. During REM dreams we are in a very light sleep and easily woken compared to stage four where we are in a very deep sleep. In the next exploration of conscious awareness we will look at the hypnotic trance and how this alters awareness.

Hypnosis

What is hypnosis, and can anyone be hypnotised?

Most people associate hypnosis with stage performers who make people do humorous things in front of an audience. These performers appear to be asleep but will do the silliest things at the suggestion of the hypnotist without appearing to be embarrassed. Why is this?

Remember we said that under an altered state of conscious awareness we have increased suggestibility? Well, stage performers make use of this characteristic as well as the fact that subjects who are hypnotised are 'disinhibited' or less aware of what others think of them. Stage hypnotists choose subjects who are easily hypnotised and more likely to show disinhibition. Only about 8 out of 10 subjects can be hypnotised and about half of those can be put into a deep trance. Those who have good imaginations, can readily fantasise and become absorbed in tasks are usually good subjects but others can be hypnotised as well. However those who do not wish to be hypnotised cannot do so against their wishes.

When under hypnosis there is always a degree of awareness of what is happening. No-one can be made to do things which their moral or ethical values would not allow.

Hypnotists use many techniques to help the subject:

- Focus their attention on the hypnotist's voice.
- To relax and feel sleepy.
- To allow their mind to accept any suggestions given by the hypnotist.
- To use their imagination vividly.

The feelings which follow can range from floating sensations, sinking sensations, being anaesthetised, or even separating from your body and many more. The overwhelming sensation is one of deep relaxation but the subject is never actually asleep as the brainwaves during hypnosis are those of a person who is awake and not those of a sleeping subject.

Whilst hypnosis cannot always improve memory it can allow the subject to remove barriers to remembering caused by trauma, but it is equally likely to bring back false memories. Therefore it is no more reliable than ordinary waking conscious memory. The ability to regress to an earlier age is also likely to be the result of vivid imagination and knowledge gained since adulthood rather that an actual memory feat.

Hypnosis has been found to be extremely useful in relieving pain and is used in a number of medical situations where traditional pain relief is not appropriate or useful. Pain control from childbirth, phantom limbs and dentistry have all been aided by hypnosis. Some therapists use hypnosis to aid problems such as giving up smoking, or weight control with some success but the subject must want to engage in the new behaviour.

As stage hypnotists have shown, subjects can be persuaded through hypnosis that lemons taste like peaches and ammonia can be mistaken for French perfume. It is only when they are brought back to conscious awareness that those senses return to normal. Other sensations such as hearing, colour sense, time sense and suggestibility to illusions can all be altered by hypnosis.

Once you have been taught to go into a trance, you can self hypnotise and use this ability as a powerful aid to relaxation. Self hypnosis is a quick and easy way to take a break and gain strength by relaxing and turning off to everyday stresses. It gives relief much the same as some forms of meditation and with an experienced teacher is something everyone can benefit from learning.

Activity 21.

Try a meditation in class.

Come dressed ready to relax in loose warm clothing. You will lose body heat during the session so bring something warm to put over you. Many students find lying on the floor uncomfortable and so a pillow and sleeping bag make it easier to experience the positive effects. Darken the room and borrow a tape recorder. Try taking your pulse before the meditation to practise.

Select a meditation tape from a library and follow the instructions given by the voice. Many people find the tapes which give you a guided visual meditation are very useful. These may have you imagining a ball of white light warming and relaxing every part of your body. And in later parts of the tape they may ask you to imagine a relaxing place such as a deserted beach or a warm forest and put you through a series of visualisations which allow you to relax using imaginative ***cues.***

When you have finished the tape, try reading your pulse again and comparing it with your pulse rate before meditation.

Are there any differences?

If so, what can you conclude?

Pulse rate before meditation ______________________________

Pulse rate after meditation ______________________________

How do you feel after the meditation?

____

____

____

____

Compare notes with others. Don't be worried if you are not immediately transported into a magical trance. Some people take years to learn the techniques and others get instant effects. The secret is letting go and using imagination. Those who do are probably likely to be good hypnotic subjects.

Drugs

There are many substances which we can take to alter conscious awareness. Those mind altering substances which were associated with the 70's hippies and 'flower power' generation achieved publicity because of their effects on the creative minds of famous people such as the Beatles and other artists, musicians and writers.

Drugs such as LSD, marijuana, mescaline and magic mushrooms produce hallucinations and distort conscious awareness to such a degree that users gained new awareness of sensations and insights into their work. For these reasons they indulged themselves without appreciation of the problems which arose as a result of the drug use. Some forms of art work known as 'psychedelic' produced colours and images which were not experienced by normal people. Music produced under the influence of some drugs often had tones and sounds which were very different to those produced without the influence of drugs. Listen to some of the late Jimi Hendrix recordings to get a feel for these musical trends.

It has been said that Lewis Carroll produced the story of 'Alice in Wonderland' whilst experiencing the effects of hallucinatory drugs. Those who know of Alice's adventures will no doubt recognise that her ability to grow or become small, and become involved in the most bizarre fantasies of chasing white rabbits and being trapped by a pack of playing cards, are probably the result of dreams or drug induced hallucinations. Alice had to eat one side of the mushroom and then the other to get bigger and smaller. Perhaps this was the reason for the magic!

Besides producing hallucinations, other drugs can alter conscious awareness by making you feel elated or depressed. Amphetamines produce feelings of alertness and activity because they stimulate the central nervous system. Other substances called barbiturates produce a sedative effect and slow down the central nervous system thus making you sleepy and relaxed. Sedatives are usually given to help people relax or sleep thus altering your conscious state to one which is less anxious.

Many of the drugs which are illegal produce what is called a rush of euphoria or well being when taken initially but because of their tendency to become addictive this pleasure rush wears thin and the body craves for more of the substance to prevent painful and horrific withdrawal symptoms.

Cocaine and substances derived from it are used medically as an anaesthetic. Most dentists use pain killing injections such as novocaine which is a derivative of cocaine. Cocaine has a stimulating effect on users which makes them talkative and excited. Heroin and morphine, both derived from the opium poppy, are narcotics used for pain relief and codeine, which is a common pain reliever, is also a derivative of opium.

It is interesting to note that in the late 1800's many patent medicines contained opium derivatives and some contained cocaine. Cocaine toothache drops were readily available and the well known 'Coca Cola', 'the real thing', also used to contain cocaine to give drinkers a lift until 1906 when drug laws forbade its use. Cocaine was replaced with caffeine and if you think you get a lift from drinking Coke you probably do!

Activity 22.

It is worth asking someone from the local Drug and Alcohol abuse centre to come to class to give a guest lecture on drug and alcohol abuse.

It is interesting to talk to someone about why people become both psychologically and physically addicted to any substances including alcohol, cigarettes and illegal drugs.

Most centres have an education officer who will be pleased to talk to the group as part of their work in the community.

Make a summary of this report in your booklet.

Visiting Speaker Report

Activity 23.

Research one of the following drugs using books in the library newspaper articles, pamphlets or other reliable materials. Describe your findings by answering the questions below.

Crack, Amphetamines, Barbiturates, Marijuana, Methodone, Benzodiazepines, LSD, Ecstasy, Mescaline, PCP, Alcohol, Antipsychotics, Caffeine, Nicotine, Anti-depressants.

1. What are some of the common names or brand names for a known drug?

   a) Where does it come from?

   b) Is it a plant or man-made?

   c) How is it taken into the body?

   d) Describe the effects it has on the body in the short term and the long term.

Activity 23 continued

e) Is it addictive?

Psychologically and/or physically?

f) Does it have medicinal uses?

What are they?

Make a notice board display of literature about the dangers of taking drugs without a doctor's advice.

As you can no doubt see, conscious awareness is not constant and can be altered purposefully or as a natural part of our daily routine as in sleeping. Rarely is our level of awareness static and our perceptions are altered constantly as a result. For example, we can be very tolerant of pain under hypnosis, and perhaps less sensitive to it when we are asleep but when we are very stressed and tense it can be almost intolerable. Probably even the same level of pain stimulus will differ according to how we feel at any given moment. In fact no two people probably experience identical levels of consciousness and throughout the day the levels of conscious awareness ebb and flow within each of us.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Conscious awareness varies according to the state you are in.	☐	☐
b)	Sleep is a state of consciousness which operates at a very low level.	☐	☐
c)	The deepest sleep is in stage three.	☐	☐
d)	The time when we sleepwalk or sleeptalk is in stage one.	☐	☐
e)	We dream in rapid eye movement sleep.	☐	☐
f)	Night Terrors are the same as nightmares.	☐	☐
g)	Not everyone is capable of being hypnotised.	☐	☐
h)	Some drugs produce visual hallucinations.	☐	☐

Answer in a sentence.

2. Describe how one drug is taken, what its effects are and whether or not it is addictive.

3. Describe the four sleep stages

4. Define hypnosis.

Fill in the correct terms in the sentences.

5. When we are fully conscious we are awake __________ and aware of what is going on around us.

6. When subjects are hypnotised they are __________ or less aware of what others think of them.

7. __________ is a form of altered consciousness where you are relaxed and your heart rate decreases.

8. __________ is the problem of not getting to sleep when you want to.

9. REM dreaming is where night __________ occur.

10. Drugs which make you drowsy are called __________

11. Morphine and heroin are both painkillers which are medically termed __________

Unit 4 — Memory

Memory is a most important cognitive skill because without it we would not be able to learn or think. In fact we would not be able to function at all well as a human being without remembering who we are, all the things which have happened to us in our lives and all of the information we have learned.

Activity 24.

Perhaps you have had the misfortune to have an elderly relative who has had Alzheimer's disease.

Can you describe to the class how a person who is afflicted behaves? Is their behaviour like that of the person you knew before?

Can you reach a conclusion about how necessary memory is for us to function as normal humans?

Memory is part of a system which is referred to in psychology as the Cognitive system. Cognitive psychologists study what goes on in the brain in memory, learning and thinking and how each relates to the other. For example;

- if we couldn't remember how could we store the information we learn?
- if we couldn't think how could we learn?
- if we couldn't learn, what need would we have of a place to store the results?
- in order to think, we need what is stored in memory such as visual symbols and sounds.

In psychology, we talk of memory, learning and thinking as though they were separate parts of our brain or systems within the brain, but in fact the brain is a complex organ which provides integrated information and reasoning. Although we do not know precisely how memory functions, we can make reasoned guesses based on facts we have gathered from reliable case studies and experiments.

Scientists all over the world are studying different facets of memory and trying to solve its mysteries. Once they discover information they test and retest until they can formulate a theory which describes what is happening. It is these theories which we can use to help us understand how this complex system works.

From what we already know about memory we can reason that it is a very organised system which usually only fails when it has good reason.

Activity 25.

Do you consider you have a **good memory** or a **bad one**?

Explain why you believe you have a good (or bad) memory in the space below.

If you believe you have a good memory, when does it fail you?

For those with a bad memory, are there any things you remember without any difficulty? List them.

Discuss with the rest of the class your findings about good and bad memories and see whether you think there are reasons for thinking you are one or the other. Does everyone have trouble with certain things?

Are males worse than females? Is there a connection between interest and good remembering as well as a connection with lack of interest and forgetting?

How often do you remember the faces and not the names of people you have met previously? Why don't you forget such things as knowing how to walk or ride a bike or drive a car? How far back can you remember? What is your earliest memory of which you have a clear image in your mind? Can you work out how old you were at the time?

Activity 26.

Make a list on the board of each person's first memory and how old they were at the time.

When you have made the list what do you notice about the ages of the people?

____

What do you notice about the things they have remembered?

____

____

____

Are many of them connected to important, sad, frightening or thrilling events in their own lives?

____

____

____

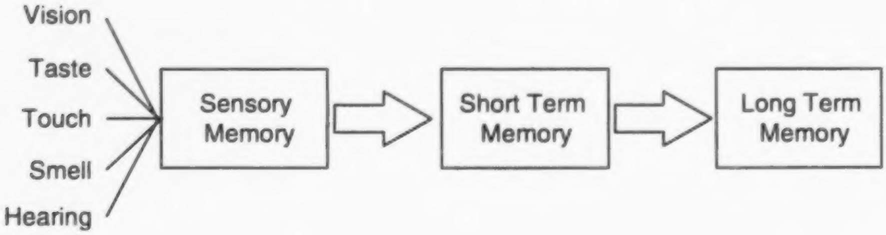
These sort of emotionally charged events are more likely to be remembered than ordinary events because they are important for the child.

Memory is a fascinating subject for many people because understanding how memory works and why it fails has great relevance for the classroom as well as everyday life. The sorts of questions we have just raised about the workings of memory will hopefully be answered for you during the class time spent studying this unit.

Stages of Memory

Memory is more easily understood if we imagine it as being divided into three stages (even though in reality, memory is a continuous and seam-free function).

- Sensory memory
- Short term memory
- Long term memory.



Sensory Memory

This is the initial stage where sensations such as vision, hearing, small, taste and touch are registered very briefly on the appropriate sensory organ. Once the organ is stimulated we make a decision about whether or not we wish to attend to this stimuli or ignore it. Should we decide to attend, the next stage will be activated and if not the sensation is discarded. Millions of sensations bombard us daily, only a few of which we attend to. We use a process called 'selective attention' to direct our attention to that which we want to explore further.

Activity 27.

By focusing on one thing we shut out all other distracting stimuli. Have you ever tried focusing on a conversation in a noisy place. Describe to the class how you behave when trying to converse over a noisy Rock Band.

Have you ever tried to solve a 'Where's Wally' puzzle, where there are lots of distracting images which make it hard to find Wally? Discuss why this seems difficult?

As you will realise, it is hard to concentrate on one thing and close off all other distractions but the brain can do this and must in order to pay attention because we cannot remember what we don't attend to.

If information is important we pass the signal on to the next stage of memory.

Short Term Memory

Short term memory (STM) is also known as working memory because it is where we do our thinking and make a decision about whether information is important enough to be put into storage for the future. Short Term Memory has several interesting and identifying features which make it clearly different from either Sensory (S) or Long Term Memory (LTM).

It only functions in the here and now. It holds information for about 18 seconds and then either passes it to LTM or discards it.

It can only hold between 5-9 chunks of information at one time and if you overload it, the information gets lost. This capacity is set genetically and we have an easy way to test how much any individual's STM as we will demonstrate later in the Digit Span activity.

We know exactly what is stored in STM at any given moment and can repeat back exactly what was said if asked. (In LTM we can usually only give the meaning of what was said and not the exact wording.)

If we want information to remain for a while we usually rehearse it or say it over and over. However if someone interrupts this rehearsal we can often lose the information. Have you ever been rehearsing a phone number after looking up the directory when someone asks you a question? What happens to the number you have been rehearsing? It usually disappears and you have to look up the number again because information is only in temporary storage in STM and needs further work for it to remain in LTM.

Activity 28.

How large is your STM?

As we said before, 5-9 items is quite normal for everyday functioning and seven items is average.

The teacher should construct a set of random digits which starts with three digits and works up to ten. The numbers should be read aloud to the class in a monotone voice and the teacher should signal the last digit by tapping a ruler on the desk. This will give you the sign to write them all down. You must get all the numbers and they must be in the correct order.

Write them in the boxes below.

1. ☐ ☐ ☐
2. ☐ ☐ ☐ ☐
3. ☐ ☐ ☐ ☐ ☐
4. ☐ ☐ ☐ ☐ ☐ ☐
5. ☐ ☐ ☐ ☐ ☐ ☐ ☐
6. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
7. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
8. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Try this on your family and see if you have similar scores.

How many digits did you manage to correctly guess?

You will most likely find that if you guessed six numbers, when you tried to get seven you got them all hopelessly wrong and out of order. The reason for this is that we cannot exceed our limit in STM and if its capacity is six then we cannot store seven items successfully without resorting to some other technique.

However the limit applies to **chunks** of information and not necessarily single digits or letters and seven chunks could refer to:

- seven dates,

  1996 1916 1066 1770 1942 1970 2000

- or seven words,

  cap mat rug cup pill sock hat

- or seven abbreviations.

  pm ABC TAFE STM LTM GPO AFL

The seven items can refer to any chunk of information which you recognise as whole and meaningful. Instead of having seven individual items think of them as seven stacks of items.

When we have sorted information as to what will be kept and what is not necessary the important information is passed along to Long Term Memory for safekeeping.

Long Term Memory

Long Term Memory (LTM) is the place where all of our memories are stored more or less permanently. We say more or less because lots of things can interrupt their safe keeping as you will find out when we discuss forgetting. The capacity for LTM unlike STM is not limited. We have an almost limitless capacity for storing memories and we can never use up all the potential storage in one lifetime.

Memories for what we learn and do every day can be divided up into categories.

1. Our own biographical details which are known as **episodic memories**. Describe one such episode in your life you can remember.

2. Our memories for facts which we have learned about the world are called **semantic** memories. Describe three facts which you know about Australia.

3. Our memories for carrying our certain procedures like making a cup of coffee and tying our shoelaces are called **procedural** memories. Describe a procedure you carry out regularly.

It appears the brain stores these three types of memory differently or has a different way of putting them into LTM. Putting information into LTM is called **encoding**. Encoding is carried out when the brain takes in stimuli such as light, sound and touch and converts one sort of signal into a message the brain can understand and store. In this case the message has to be an electrical and chemical signal to get to the brain and go into storage for the long term. It is a little like a tape recording which changes sound into magnetic signals which are stored on the tape and then converted back into the original sounds when you want to play them back.

How do we know then that the brain treats episodic, semantic and procedural memories differently?

In cases of people who have lost their memories have been studied, it has been found that they may not know who they are or any facts that they learned at school, but the chances are they will know how to swim, ride a bike or make a cup of tea. The procedures for some reason seem to be very resistant to being lost or disrupted. Scientists guess that they are stored in a different, and more protected area of the brain.

Ways of Remembering

When we try to remember information there are several different techniques we can employ.

1. We can **recall** information.

This involves digging into the memory and bringing back information which is needed. Recall often needs lots of prompting with cues to help us retrieve what we are searching for. It is not a reliable form of memory and many of us have that horrible feeling that we should know but can't dig out the correct information. This is the memory technique we use for remembering people's names hence we often forget.

2. We can also use **recognition** memory.

Our memory for recognising what we know is far superior to recalling it. Hence we know the person's face because we recognise that we've seen it before but the name eludes us. The police use recognition memory when they put suspects in a line-up, or show you the book of Mug Shots. You will more often recognise a suspect than you will be able to give an accurate description from your recall memory.

Often in an exam you will find it easier to answer the multiple choice questions because you will recognise the correct answer when you see it. However asking you to write an answer from what you recall is not as easy.

3. Another way of remembering is **relearning**.

If you want to know whether you have already learned something the best way is to relearn the material. You will find it comes back very quickly even if you haven't done it for years. Have you ever tried relearning a language you spoke at home in your childhood but didn't use again? How about riding a bike after not using one for years? Can you remember how to swim from season to season? Chances are none of those things took as long to learn second time round as they did the first. The speed taken to relearn something tells us that we have it already stored and the brain needs only to revive the memories and refresh them for use.

Most of the time we store information in LTM according to meaning. We call this **semantic** storage because the study of semantics is about word meanings. When you read a book, see a play or a movie you will probably remember some bits exactly as you heard them but most of the information will be stored in the form of a summary and you will tell someone about the ideas or repeat the story line but not all the conversations. Anyone seeing 'Wayne's World' will probably remember all the funny catch phrases which they used but not the whole of the dialogue. Why?

It appears that the ability to store things in shorthand gives us the ability to store more information than if we stored information **verbatim** or as it was given. There is also no real need to store everything because only the overall meaning is what is usually needed.

We also have memories which are stored via the senses just as we experienced them initially so that if I asked you to imagine your favourite melody you can probably hear it playing in your mind with a full symphony orchestra or the rock band who made it a hit. You can also visualise a rose or the face of a friend as well as their voice on the telephone. How many can remember tastes and the smell of particular foods they love or hate as well as the feel of certain fabrics such as silk or rough wool on their skin. Such sensations seem to be recorded as they actually appear in real life rather than as semantics or meanings.

Visual memories are stored much as we see them but perhaps we do lose some details. To give you some idea how visual memory works complete the following activity.

Activity 29.

How many doors does your house contain?

In order to make an accurate count, most people would have to take a mental walk around the house counting as they go. Is that how you arrived at the answer?

Does your front door open from left to right or right to left?

Most people have to visualise themselves standing at the front door and going through the motion of opening the door to answer this question.

Visual memory is probably the only way we store such memories and although we use semantic memory most of the time, visual memory is important too. We store faces and places we have been to and the way things look so that we can recognise them again. Without visual memory everything in life would have to be identified every time we saw it again. It would be time consuming and slow.

Forgetting

Most of us have no difficulty with forgetting. It is a human failing which everyone suffers from at some stages of their life. It is often associated with older people and particularly with diseases of the brain which often result in forgetting. But in fact most forgetting is caused by ordinary everyday causes to which we are all subject. Some of the major causes include:

1. Lack of Attention

Most forgetting occurs because we didn't selectively attend to begin with. What we don't put in we don't remember. The information cannot be encoded correctly if enough attention is not given and therefore it is never stored in enough detail to remember well. Things which are of great significance we pay a lot of attention to and therefore remember very well. Do you remember parts of a message and not others?

Of course what is important to you may not be so for other people and so they may accuse you of not attending because you didn't remember the bits they considered were important.

Attention is a personal judgement !

An experiment in the US demonstrates how little attention we pay to every day things. Conduct the following activity on the class as well as family and friends.

Activity 30.

Everyone in the class should draw from memory, the back and front of a 10 cent coin in as much detail as possible.

Front

Back

Most people will be able to draw the Queen's head on one side, but what about the tail side?

Get out a 10¢ coin and compare the differences to your drawing. Did anyone succeed in drawing a good replica? If they did, chances are they collect coins or have some other reason to notice. Most people won't.

The reason is that things we see every day do not need a lot of attention because once we are used to them we tune them out or **habituate** to them. In other words we no longer attend.

2. Lack of Cues or Prompts

Quite often we know that we know something but it cannot be retrieved. Sometimes we need a **cue** to help us retrieve information. Cues can be anything which prompts our memory such as photos, smells, places and things said by others.

Activity 31.

You see someone on TV whose name you cannot remember. What strategies do you use to try to remember?

Make a list of those used by other members of the class.

Many people rely on cues to help them such as context. This involves putting your mind back to the context where this information belongs. For example, if you mislay your car keys do you retrace the steps prior to them becoming lost? If you see someone whose face you recognise but you don't know from where do you picture them at all the places you frequent in an effort to put them into the correct context? Old school photos are marvellous cues to bring back information we once thought we had forgotten. Get one out and remember as much as you can about who the people were and events which happened at that time.

Have you ever tried to remember a dream in the morning and found it was gone but later in the day it flashes back because of a trigger provided by a conversation or an event? Cues are powerful prods for memory. A diary is the best cue for students' memories.

3. State

Sometimes the emotional or physical state we are in will help us to remember things which happened in a similar previous state. In other words if you are depressed now it may trigger memories of the last time you felt that way. If you have ever been drunk and tried to remember what you did in that state you may be unable to remember but if you get drunk again, you may just remember what you did last time.

People who are alcoholic frequently hide their alcohol when drunk and can't remember where they hid it until the next bender when they recover the memory.

4. Interference

Interference takes place in two ways. Things you have learned previously can interfere with new learning. An example of this is when you get a new car and the wipers and indicators are in a different place on the new car, you take a while to get used to the new position and frequently turn on the wipers instead of the indicators. On a new keyboard if a key is in a new position it takes a lot of errors before you get used to the new spot.

However once you get used to the new you cannot successfully return to the old ways and so new learning interferes with the ability to remember old. If you have received a new bank pin number recently and remembered it successfully can you recall the old one? When driving an automatic for a long time can you readjust to driving a manual car without forgetting to change gears all the time? Most of us suffer from interference which hinders our ability to learn new or remember old information.

Activity 32.

Make a class list of those situations where you have experienced forgetting due to interference.

5. Motivated Forgetting

Sometimes we plan to forget on purpose or we forget unconsciously because it helps us to survive through trauma. Many victims of abuse find they have repressed memories which means they have banished painful memories out of conscious awareness and are not able to recall them at will.

Hypnosis may unlock these if they need to be confronted as part of therapy but not necessarily. Repression is a Freudian term and is a frequent solution people use to block trauma however, sometimes the repressed memories need to be brought out and confronted if people are to move on to fulfilling and rewarding relationships and lives.

Activity 33.

Collect articles from the newspaper which describe cases of motivated forgetting. Perhaps famous people have many reasons which make it preferable to forget on purpose! Do you think these cases are telling the truth or do they have another agenda?

____

____

If you watch the movie ‘Sybill’, you can see how multiple personality disorder makes Sybill forget where and who she is when one her personalities takes over. This is a form of motivated forgetting known as ‘fugue’.

6. Disease and Forgetting

There are several common causes of forgetting due to brain damage and disease. Alzheimer's disease is probably the most publicised and afflicts mostly older people but is not a product of ageing necessarily. The chances of getting Alzheimer's disease increase with age but the modern philosophy is to keep mentally active to prevent a lot of forgetting associated with ageing. Old people are frequently lonely and not being socially active can have detrimental effects on one's mental health.

Other reasons for forgetting can be due to brain injury. Any injury to the head can result in temporary or permanent damage in the form of amnesia. Some amnesiacs forget what occurred before the injury but can remember what has happened since whereas others can remember what happened prior to the injury and cannot store memories since the accident. Amnesia is common after head injuries and can result in partial memory loss much like the effects of a stroke. Stroke victims can often lose their language and have to relearn how to speak.

Activity 34.

A visit from a guest speaker who deals with elderly Alzheimer's patients may prove very interesting or perhaps becoming a volunteer at a nursing home would be a great learning experience as well as giving some of the residents a bright spot in their day.

Organise either a visit to a home or a visiting speaker.

7. Drugs and Alcohol

Many drugs and alcohol affect our memory. Alcohol kills brain cells and interferes with the way Long Term memories are stored. Alcoholics can often experience blackouts lasting from a few minutes to much longer periods.

Marijuana has a detrimental effect on memory and slows STM to the point where users cannot focus their attention properly. Many other drugs also interrupt memory and make users confused and unable to think quickly.

8. Serial Position Effect

The position of information will often affect our ability to recall it. We tend to forget the words to a song or poem in the middle rather than the beginning or end. Why is this? The experts suggest that we probably learn the beginning most thoroughly and the ending is freshest in our minds but it is the middle which is vulnerable. This is called serial position effect.

Activity 35.

Study this list of 15 words for **one minute** and learn them by reciting them.

Cup, ball, man, ring, sheep, button, dog, flower, bed, gate, hill, snail, bat, chair, cat

Once the minute is up you should write them in any order without looking at your book and total up how many times each member of the class recalled each word correctly. Make a summary of correctly recalled words on the handout from your teacher.

Did you find that people remembered the middle words least? Which was the best remembered word and which was next?

If you notice that your memory for 'middles' is not good then you can overcome it by starting to learn at different places and not always the beginning, or at the least paying more attention to learning the middle.

Improving your Memory

There are many simple ways you can improve your ability to remember which cost far less than some memory improvement courses. Many of these courses will tell you the same information that students of psychology take for granted.

1. Pay Attention

Take notice of details and make a point of trying to remember them. Rehearse important things to get them into LTM. Ask questions which clarify what you don't understand. We don't remember what we don't understand. Take notes or make drawings if they help.

2. Try Memory Techniques

There are lots of little techniques for remembering difficult information such as:

- Singing a maths formula to a well known tune or singing the body parts for biology.
- Making a rhyme such as 'Thirty days hath September'.
- Making up a silly sentence which matches the first letter of the list you wish to remember. Students often do this to remember the position of the planets of the solar system -(my very eager mother .... stands for Mercury/Venus/Earth /Mars).
- The lines and spaces of the musical stave are known as 'Every good boy deserves fruit' and FACE.

3. Make Visual Memory Work

One of the best kept secrets about remembering is to create mental pictures of things you want to remember. The sillier and more amusing they tend to be the better they work.

For instance if you want to remember to get your dry cleaning and something for tea, imagine yourself going in to the dry cleaners and there standing behind the counter is Tom Cruise, who asks you out and you say, 'Sorry Mum's doing a lamb roast tonight'. (You probably won't forget your roast and drycleaning with such an image to remind you).

Activity 36.

Visualising is better than rehearsing by repetition. The following activity will show this.

You have two minutes to learn each list of paired words.

You must learn the first group of word pairs by repeating them. When the time is up, the teacher will give you a handout and you are to write the matching words on your answer sheet.

Repetition List:

love — show
beauty — score
hard — great
time — easy
last — help
final — past
weight — main
mood — poor
practise — cheap
study — after

With the second list you must make mental images which connect both words in one picture, eg monkey/hat — picture a monkey going to the races all dressed up in a top hat.

Image List:

apple — frog
tent —- horse
tree — fox
slipper — soap
balloon — cat
cake — garden
spade — ribbon
glass — candle
drum — table
ring — church.

Activity 36 continued.

Now recall the image of each pair and write down your answer on your handout sheet. Add up your scores for both imagery and repetition and make a total class score for imagery and one for repetition. Which technique was the easiest to remember?

Most people find they can do far better with the images than the repetitions and once you know how to image it is hard to stop yourself from making these mental images. Some information can only be learned by rehearsal although some people only know their PIN or phone number when the numbers are there before them so they can visualise the pattern.

As we said at the outset of this section, memory is only as good as the information you put in. When you put it in with care it will be stored well for a long time. Our memories are only as good as we allow them to be and will not work well under stress or illness so if you are prone to forget, think about why and try to remedy what is wrong.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ✓ the appropriate box.

		True	False
a)	Recall is more sensitive than recognition.	☐	☐
b)	Selective Attention is needed to focus on the important things we want to remember.	☐	☐
c)	A digit span test measures how much is stored in long term memory.	☐	☐
d)	Episodic memories are biographical details of our lives.	☐	☐
e)	Cues prompt information contained in Short term memory.	☐	☐
f)	Repression was Freud's term for motivated forgetting.	☐	☐
g)	Alcohol and drugs can interrupt memory storage.	☐	☐
h)	Sensory memory can hold seven chunks of information.	☐	☐
i)	Long term memory has an almost limitless capacity.	☐	☐
j)	Interference causes us to forget.	☐	☐

Answer in a sentence.

2. What are three facts you remember about short term memory?

3. What are semantic memories?

____

____

____

4. What are procedural memories and how permanent are they?

____

____

____

Fill the gap with the correct terms.

5. ____________________ memory holds information for about 18 seconds.

6. We remember faces and not names because ____________________ memory is stronger than our memory for ____________________

7. ____________________ is the most sensitive measure of what we have learned already.

8. Most times we forget due to lack of ____________________

9. Forgetting the middles of lists is due to ____________________ effect.

10. A ____________________ is a rhyme or technique to remember things.

Unit 5 — Learning

Learning is an activity which involves both memory and thinking. Even though we tend to think of them as being separate activities, when we think we learn from our thoughts and then we remember them for use next time. In fact, the brain has separate ways of dealing with each activity but they are an integral part of one system in the brain.

When do you think humans begin to learn?

Is it in the womb, or perhaps the moment we are born, or is learning limited to what we do at school?

Activity 37.

Discuss with the class when learning begins. What conclusions do you reach?

Learning begins ____

____

____

____

Learning, as psychologists define it, does not include any behaviours which we can attribute to the normal **maturation** of an individual. Behaviours such as sitting, crawling, breathing, crying, laughing, walking and to a certain extent, talking, are all attributed to the maturation process and would eventually happen given adequate environmental support.

For instance, parents do not actually teach their children to put one foot in front of another even though they may encourage a child to remain upright and hang on to objects in order to gain their balance to walk. Walking is a natural function of maturing but children will not be able to do it as effectively if they spend all their days sitting in a high chair.

In order to discover the elements involved in a learning sequence, psychologists had to examine a very simple learning situation. They did so by looking at simple connections or **associations** whereby the learner associated that when a particular action took place something else was associated.

For instance you learn that when black clouds appear in the sky, a rain shower is likely to follow. Learning by simple association can be described as 'this goes with that' type learning and very small babies learn this very quickly from the first days after birth.

Activity 38.

Describe the sort of association learning which may occur in a baby's life the week after birth.

Describe the sort of association learning a toddler may develop.

Describe how adults may develop ideas about a lucky rabbit foot, lucky numbers or other superstitions by associative learning.

Pavlov and his Dog

In the early part of the 20th century when psychology was a very young science, a Russian Doctor, Ivan Pavlov who was interested in the action of salivation in dogs, accidentally became interested in association learning in animals.

When a dish of meat powder appeared, the dogs became excited and salivated at the prospect of something to eat. Saliva was collected and measured via a tube inserted into the dog's cheek.

After several trials, the dog realised that the food was coming when he saw Pavlov or his assistant appear at the door and would salivate even before he saw the food.

Pavlov realised that the dog had made an association with the appearance of the assistant and food and wondered whether he could make the dog associate other things with the appearance of food. His measure of whether the dog had made any connection was whether the dog salivated before the food appeared.

Pavlov successfully paired a number of events with the appearance of the dog's food such as bells and buzzers ringing, lights going on and tuning forks being struck. By pairing the stimulus, such as a bell and food powder often enough, the dog began to think that these two events belonged together and that one meant the other would happen.

Eventually, after many such paired trials, the dog would salivate to the sound of a ringing bell or light bulb alone, in expectation of the meat powder to follow. In other words, the dog had learned that the two things were associated.

Why was this so important in the theory of psychology?

Pavlov had unlocked the essence of what takes place in a simple learning event. In fact, his theory helped to explain how a lot of learning takes place in human life, and many other psychologists went on to discover how more complex learning took place as a result. Pavlov called his paired association learning conditioning, and it is nearly always referred to as Classical or Pavlovian conditioning.

Activity 39.

Your pets have already been conditioned to associate certain events with something else. Can you make a list of paired events which reflect that association learning has taken place.

e.g. what does your dog do when you pick up his leash?

Phobias and Classical Conditioning

Classical conditioning is nearly always the basis of phobias. We associate the feelings of extreme fear with some stimuli after just one bad experience and forever after, avoid contact with that stimulus. In some instances we do not even have contact but the experiences of another person are enough to trigger off this irrational fear of an event.

Most phobias are exaggerated fears, as the fear reaction is out of proportion to the actual event. After all, fear of snakes and growling dogs is probably reasonable but fears of daddy-long-legs spiders and mice have no rational basis. After all, when did a mouse last savage someone to death?

Activity 40.

Can you cite an event after which your fears developed? In other words, are your fears as a result of learning or are they learned from another person such as a sibling or parent? Did you become phobic after watching them show extreme fear when exposed? How could association learning be involved in this?

Operant Conditioning

As a result of Pavlov's work, other psychologists became interested in the process of learning and went further to explore more complicated examples. A group of psychologists, known as Behaviourists, were interested in the effects of reward and punishment and how these affected behaviour. They believed you could condition or teach people or animals by the use of **reinforcers.** This was the name they gave to anything which would make a person repeat or stop their behaviour. For instance, a reward would more than likely make a person repeat a behaviour and a punishment would more than likely stop it. Both rewards and punishments are types of reinforcement.

This method of learning became known as **Operant conditioning** because the learner actually operated on the environment and was reinforced afterwards with either a punishment or a reward. This is a more sophisticated form of learning than simply making a connection or association.

Probably one of the best known Behaviourists was BF Skinner who spent his whole professional life studying the theory of Operant conditioning. His experimental subjects were pigeons and rats and by putting them into controlled environments and manipulating their rewards and punishments, he provided us with much knowledge about the way animals and people learn best. The little boxes where experimental research took place were often designed and made by Skinner himself who was quite a handyman. They were called Skinner boxes as a result of his influence.

Skinner believed that all behaviours depend on their consequences. For instance, if you repeatedly try to pass a subject and fail each time, you are more than likely to give up trying because the consequences of trying for you are failure. However, if you try another subject and the teacher praises you and gives you good marks, you will more than likely go further. If you have been punished for a behaviour you will probably not repeat it, but not always. This is because punishment is not always effective as a deterrent.

Positive reinforcers which act like rewards, are more likely to get people to produce similar behaviours again and are better at helping people learn than punishments.

Activity 41.

Make a list of your own where behaviours you have tried have been positively reinforced by such reinforcers as praise, money, self esteem, good marks or others.

Make a list of those behaviours which you have stopped because you were punished.

Describe the punishment you received for doing them.

Which sorts of punishment did you like least and which was the easiest to cope with?

Discuss these with other members of the class.

Punishment

Punishment as a consequence of learning can lead to problems. For instance, many punishments are based on either deprivation of some desired benefit or a physical punishment such as smacking. Parents often use punishments such as withdrawing privileges, pocket money, or smacking to control children's behaviour.

Activity 42.

Take a survey of class members as to who was smacked as a child and who smacks their own children. Why do some smack? Why do others refrain from smacking? Ask them to explain why they chose either behaviour.

What are the benefits and disadvantages of smacking children as a punishment?

Benefits	Disadvantages

What about the effects of other punishments in our society? Do you think the current driving punishments make safer drivers? Do you think legal punishments such as jail terms really stop anti-social behaviour?

Some countries have very stringent punishments for crimes such as drug dealing. In Singapore for instance, you can go to jail and in severe cases, lose your life if you are found possessing drugs or dealing them. Is this the way to curb unwanted behaviour?

Activity 43.

Conduct a debate on how best to get people to behave responsibly in our society.

Does capital punishment deter criminals? Does the thought of getting caught stop people committing crime ?

Perhaps the group has decided that in some circumstances punishment is necessary but in other cases a more effective method of making people act responsibly is needed. There is no answer but at least parents can be warned about the dangers of punishment for their children.

Positive reinforcers nearly always work better than punishments because there are no bad effects. How many children are wary of Dad because Mum let him do the belting when he came home from work? How many hated the punishing parent compared with the one who didn't?

Punishment has bad consequences when we are subtly teaching children that big people have the power to hurt little people. This can mean they may want to be big people who can hurt when they grow up and some of today's violence stems from attitudes learned at an early age. Perhaps such attitudes may come from a home life where parents who continually smack are teaching that problems are solved when you use aggression.

Even animals will learn better when positively rewarded rather than punished, as you will see after the next activity.

Activity 44.

If you have a pet at home, try teaching it a new trick using positive reinforcement. Decide on a behaviour you would like it to learn. Try such things as stopping at the curbside on command before crossing the road, or perhaps making the pet wait until the bowl is put down before letting it begin to eat. It is worth putting the effort into useful behaviour rather than a simple trick.

As soon as the animal is shown the behaviour and makes any effort to do what is asked, reward with small pieces of food. Dried food is convenient, especially if the animal likes this, but only one piece at a time.

Every time the animal makes a near approximation, reward them immediately with food and affection, saying 'good dog' or something similar. Keep rewarding for successive approximations until they understand what you want, and then reward *only* when they do it right. Using hand signals, or one word, is a useful signal for the desired behaviour. Signals such as 'sit' or 'stay' or 'lie down' are short and easy for a dog or cat to master with success.

Report back to the class how you succeeded with this learning plan.

Eventually the animal will only need to be rewarded with food every so often for performing, and for all other occasions with love and affectionate pats (after all, a fat animal is not what we want to achieve, just an obedient one).

If you must punish, do so with kindness and not with harm. Trying to train a cat is difficult, especially if they have developed bad habits, but you can punish by squirting a water pistol at them from afar if they misbehave, as well as rewarding the behaviour you want them to learn.

Describe how you achieved your aim in a short sentence.

As Skinner correctly identified, there are consequences for behaviour which will shape our future behaviour depending on what happens when we react to any stimulus. However, there are not always others around who will reward and punish our behaviour, and people will still behave in anti-social ways despite severe punishments, so there is something else which acts as a stimulus for learning which is simply not a function of either association or a consequence or our actions.

Cognitive Learning

This takes place when an individual or animal shows evidence of learning which is neither Classical conditioning or Operant conditioning. It is usually confined to higher order mammals, such as chimps and humans, and includes such behaviours as problem solving and watching and copying others.

Observational learning can take place when individuals watch someone else behaving in a way which they want to copy. A person whom you admire and want to emulate, is known as a **role model** and can be anyone including, older siblings, friends, sporting heroes, parents or television characters.

Activity 45.

Make a list of the role models who have influenced your life in any way. Describe how you were influenced and why were you influenced by this particular person.

What are the effects of young people choosing negative role models such as the characters in the film 'Romper Stomper'?

Other observational learning situations can include seeing others rewarded or punished for behaviours. We will be more likely to act in a way we have seen others rewarded for than those we have seen punished. We often observe such actions as problem solving and store these away for later use. We are constantly observing people in situations, making judgements and learning from their actions and often we do not show any outward sign of that learning at all. However, we have the results of that observation stored in our brain as a memory to use when appropriate. This is referred to as **latent learning**, or hidden learning, as there is no outward sign of reward or learning taking place.

Activity 46.

Discuss the impact of the Transport Accident Commission advertisements on television.

What are they trying to teach us, and how are they trying to achieve this?

Another form of cognitive learning takes place when you discover things accidentally. Child play is an important way of encouraging **discovery learning**. Adults who tinker with machines and objects are also engaged in discovery learning. This form of learning is useful as it needs no reward or punishing adult and often the skills or solutions you gain give you understanding and insight into a problem.

Activity 47.

Which sorts of things would you best learn by observing and imitating others?

Which sorts of observations would make sure you did **not** engage in certain behaviours?

How influential is television at producing negative and positive behaviours in people? Debate the argument that television violence promotes violence in society.

Collect articles about the debate on children's television and what is acceptable. Come up with a classroom charter for what is acceptable to be shown on network television to children under 16.

TV viewing rules for under 16's

Imagine how slow it would be if everything you learned had to be through personal experience and either rewarded or punished by another person as a consequence. Cognitive learning allows us to learn through the experience of others which is often more expedient than personal experiences. It is quicker to imitate someone else who solves a problem than to spend hours working out how to do it yourself. It can give us strategies about how to approach similar situations in our own lives or teach us to avoid similar situations such as those depicted on the TAC adverts.

Cognitive learning is the most useful way of learning complex behaviour but this is not to say that classical and operant conditioning do not also have a use.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Pavlov conditioned his dogs to salivate when they heard the bell.	☐	☐
b)	A reinforcer is applied after you have responded to a stimulus.	☐	☐
c)	A Skinner box punishes an animal when it makes an incorrect response.	☐	☐
d)	Phobias are the result of operant conditioning.	☐	☐
e)	Positive reinforcers are much the same as rewards.	☐	☐
f)	Smacking is the most effective form of child punishment.	☐	☐
g)	Children learn only positive behaviours from role models.	☐	☐
h)	Latent learning is not obvious to an observer.	☐	☐

Answer in a sentence.

2. What is the difference between classical and operant conditioning?

____

____

____

3. If you wanted to get an adult to give up smoking which type/s of learning would you use and why?

____

____

____

4. Describe how you get a child to overcome a fear of dogs using a role model.

____

____

____

Fill the gaps using the correct terms.

5. When you associate one event with another it is known as _______________ conditioning.

6. My dog shows evidence of _______________ conditioning when he hears me get the car keys because he loves riding in the car.

7. ____________________ are likely to increase or decrease the responses of an individual.

8. ____________________ are usually more successful than punishment.

9. Negative behaviours are more often the result of ____________________ than positive reinforcers.

10. A ____________________ is a person whose behaviour you would like to imitate.

11. Peter who is out in the garage watching his uncle fix the car is engaged in _____________ learning.

Unit 6 — Personality

Most people are very interested in the psychological notion of personality. They think of it as the skill of being able to get on well with others, charm or charisma when they make remarks such as, 'She has such an outgoing and warm bubbly personality'. Sometimes we draw a conclusion that someone has no personality when they are introverted or shy and unable to socialise. In fact, everyone has a personality which is unique to them.

Psychologists think of personality as **enduring and relatively stable characteristics and behaviour patterns** which do not necessarily imply any social skills at all. Personality is a mix of characteristics such as attitudes, talents, values, hopes, loves, hates, and habits.

Personality is not to be confused with **character** or **temperament**. Character is the characteristic which grows with us as we experience life and people can develop either bad or good characters as a result of the lives they experience. Temperament by contrast is something which is present at birth and is a result of heredity.

Activity 48.

Look at two family members and compare them according to the following aspects.

Emotional nature ______________________________

____

Sensitivity ______________________________

____

Activity levels ______________________________

____

Mood ______________________________

____

Irritability ______________________________

____

Adaptability ______________________________

____

Are there enormous differences you can perceive? Do they resemble one of your parents or relatives?

Early Theories of Personality

The Greek Physician Hippocrates (400 BC) suggested that temperament came from a dominance of one of four bodily fluids or **humours**:

- blood
- phlegm
- yellow bile
- black bile.

Temperament	Characteristics	Humour
sanguine	• optimistic, cheerful	(blood)
choleric	• irritable, hot-tempered	(yellow bile)
melancholic	• depressed, sad, gloomy	(black bile)
phlegmatic	• calm and sluggish	(phlegm)

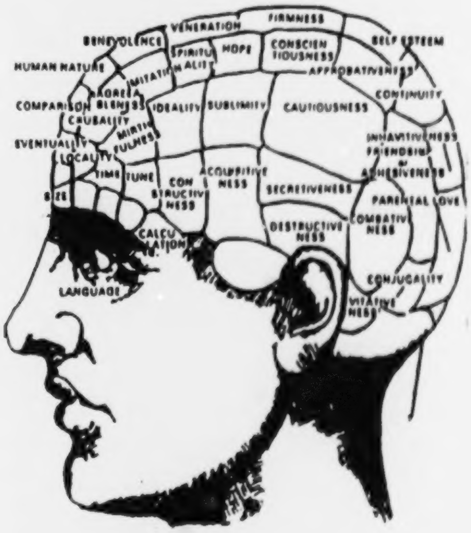
Even though we no longer think of personality as stemming from this source there are still historical traces of this belief when we refer to heroes as red-blooded or sanguine and those who appear to be without energy and drive as phlegmatic. e even say that people who are irritable are 'liverish,' referring to the bile production area of the body.

Most mothers would be able to tell after a very short time about the temperament of their newborn baby. Babies usually show themselves as placid and easy going or irritable and fussy within a short time. Which sort were you? Is your temperament still similar?

Phrenology

An equally bizarre theory of personality came from German anatomy teacher Franz Gall who suggested that personality is revealed by the shape of the skull. Gall had the gall to suggest that various sections of the head controlled different talents and abilities both negative and positive. Bumps over the ears, for instance, were known as 'thieving bumps' as Gall had noticed this feature on some of the prisoners he had examined.

These days we don't rely on such arbitrary measures to account for personality, but many people still think that reading palms and handwriting as well as the birth sign you happen to be born into will influence your personality. Fortunately for most people, there are better ways of accounting for your personality characteristics!


VENERATION
FIRMNESS
BENEVOLENCE
SPIRITUALITY
HOPE
CONSCIENTIOUSNESS
SELF ESTEEM
HUMAN NATURE
IMITATION
APPROBATIVENESS
AGREEABLENESS
CONTINUITY
COMPARISON
IDEALITY
SUBLIMITY
CAUTIOUSNESS
CAUSALITY
MIRTHFULNESS
EVENTUALITY
INHABITIVENESS
FRIENDSHIP
LOCALITY
ADHESIVENESS
TIME
TUNE
CONSTRUCTIVENESS
ACQUISITIVENESS
SECRETIVENESS
SIZE
PARENTAL LOVE
COMBATIVENESS
DESTRUCTIVENESS
CALCULATION
CONJUGALITY
LANGUAGE
VITATIVENESS

A phrenologist's chart — adherents say bumps in these areas can give clues to character.

Trait and Type Theories

In the early days of psychology, theorists were obsessed with the idea of measuring and quantifying personality characteristics. As a result, many personality tests were simply measures of characteristics called **traits** and **types**.

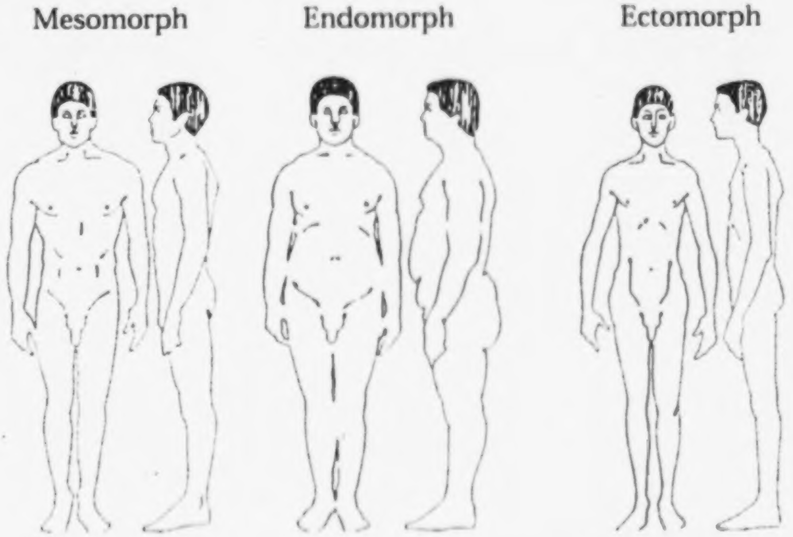
William Sheldon, for instance, suggested that people could be typed according to their body build and his theory suggested that there were three basic types:

Physique	Characteristics	Temperament
endomorphs	• soft and round, relaxed and love to eat	viscerotonic
mesomorphs	• muscular, strong, athletic, energetic and courageous	somatotonic
ectomorphs	• sensitive, long, fragile, large brain, fearful, artistic	cerebrotonic

Sheldon also said that you could rate each type on a scale of one to ten so that a person could be a strong mesomorph 8, and a weak ectomorph 3 and a weaker endomorph 1. This meant that you could be a mixture of all three types.

Activity 49.

Which one do you best fit?



If you are not a typical body type can you rate yourself on each one using a scale of 1–10?

Choose a person in the class who is a typical example of each of Sheldon's types?

Do you think this has flaws as a system for measuring or describing personality? In fact, how often have you met fat, miserable people or thin, jolly people?

Carl Jung

Famous Swiss Psychologist, Carl Jung says that all people can be classified into one of two types; introverts and extroverts.

Introverts tend to avoid others especially in times of stress, prefer to be alone and are usually shy.

Extroverts seek out the company of others, especially in times of stress, and often seek out work which involves a lot of human interaction. They are usually outgoing and sociable.

Probably no-one is either purely introverted or extroverted but we usually show a tendency for one which could be measured on a continuum like the one shown below.

Activity 50.

Place a mark which shows where you belong on this continuum.

Introverted

Extroverted

Gordon Allport

Psychologist Gordon Allport (1961) suggests that there are traits or enduring characteristics which people exhibit throughout life. These traits guide behaviour to make us consistent in thought and actions. For instance, Mother Theresa's enduring traits are service to the community and humility, which have guided her life's work.

Allport said these traits could be classified into three groups.

Cardinal traits. These traits are dominating characteristics which pervade every aspect of life. Allport says very few people exhibit cardinal traits. (Mother Theresa's traits mentioned previously fit this category.)

Central traits. These are the building blocks of personality which dominate a person's behaviour. Most people have only around five central traits, eg optimism, honesty.

Secondary traits These are less influential and can be changed depending on situations. They could be food and music preferences, political persuasion, attitudes, opinions etc.

Activity 51.

Describe your central traits from the list below using up to five adjectives.

Check the traits you feel are characteristic of your personality. Are some more basic than others?

- aggressive ☐
- organised ☐
- ambitious ☐
- clever ☐
- confident ☐
- loyal ☐
- generous ☐
- calm ☐
- warm ☐
- bold ☐
- cautious ☐
- reliable ☐
- sensitive ☐
- mature ☐
- talented ☐
- jealous ☐
- sociable ☐
- honest ☐
- funny ☐
- religious ☐
- dominant ☐
- dull ☐
- accurate ☐
- nervous ☐
- humble ☐
- uninhibited ☐
- visionary ☐
- cheerful ☐
- thoughtful ☐
- serious ☐
- helpful ☐
- emotional ☐
- orderly ☐
- anxious ☐
- conforming ☐
- good-natured ☐
- liberal ☐
- curious ☐
- optimistic ☐
- kind ☐
- meek ☐
- neighbourly ☐
- passionate ☐
- compulsive ☐
- intelligent ☐

Raymond Cattell

Raymond Cattell, another psychologist interested in describing personality according to traits, devised a test called the 16PF (personality factors). This test asks you to choose between word opposites and score yourself between one and ten. This gives what he calls a personality profile and it shows that groups of people who are like-minded show similar clusters of characteristics. Those who are artistic, for instance, are very different in profile from airline pilots.

Activity 52.

Plot your profile on the chart below and compare your scores with others in the group.

	1	2	3	4	5	6	7	8	9	
Reserved										Outgoing
Concrete thinking										Abstract thinking
Affected by feelings										Emotionally stable
Submissive										Dominant
Serious										Happy-go-lucky
Expedient										Conscientious
Shy										Bold
Tough-minded										Sensitive
Trusting										Suspicious
Practical										Imaginative
Forthright										Shy
Self-assured										Apprehensive
Conservative										Experimenting
Group dependant										Self-sufficient
Undisciplined										Self-controlled
Relaxed										Tense
	1	2	3	4	5	6	7	8	9	

Personality Tests

There are many personality tests employed by psychologists which categorise people according to traits or types. Sometimes these tests are useful to give an overview or a generalised picture of an individual's behaviour, but behaviour is also influenced by situations and even the calmest and most easy going people have a frustration point at which they will explode. However, what personality tests are measuring is your usual modes of behaviour and not extremes.

Most of the personality tests you find in magazines will not tell you much of value about your personality because they are neither reliable nor valid. True psychological tests have been tested on large numbers of people to give a result which is consistent. These tests are often employed in job selection, perhaps in deciding mental illness or adjustment.

Activity 53.

It is interesting to use a rating scale to assess another person and to get them to assess you using the same scale. Quite often, how we view ourselves is not how others see us.

Rate yourself and get someone in the class to rate you to see how these opinions differ.

Discuss the findings.

How in-control is your subject?

▲	▲	▲	▲	▲
In control at all times, shows no emotion	Remains calm and controlled in most situations	Expresses moderate emotion at times	Is easily aroused to emotional display	Has little control over emotions

Decide how introverted or extroverted your subject is.

▲	▲	▲	▲	▲
Very introverted, withdrawn	Moderately introverted, shy	Balanced mixture of introversion, and extroversion	Moderately extroverted, outgoing	Very extroverted, friendly, active, and assertive

How much leadership potential do they have?

▲	▲	▲	▲	▲
Very low	Below average	Average	Above average	Very high

What sort of mood is the subject in?

▲	▲	▲	▲	▲
Depressed, despondent	Sad, subdued	Neutral	Happy, relaxed	Euphoric

One of the most commonly personality tests used is the **MMPI 2 (Minnesota Multi-phasic Personality Inventory)** with 567 items. This test can identify personality disorders such as schizophrenia, depression and deviance. It asks you to check items such as:

- I avoid being in a crowd wherever possible.
- Someone has been trying to poison me.
- I daydream often.
- I enjoy animals.

Another commonly used test is the **Myers-Briggs Personality Test** which also yields a profile which can be useful in typing people's usual behaviour. It can show that people with certain characteristics gravitate towards jobs where these skills are appropriate.

For instance, Social Workers are often the ' thinking, feeling, intuitive' types whereas Scientists are often conversely 'logical, analytical, unemotional'. However, we must beware of stereotyping all people according to type because there are always exceptions.

Freud and Personality

Sigmund Freud, the Viennese Doctor who pioneered much research in Psychology in its infancy, had ideas about how personality was formed which influenced our thinking for a long time. Freud's psychoanalytic view suggested that early experiences in childhood affected our later behaviours in adulthood and often without our conscious awareness.

After years of studying patients who had symptoms but appeared to have no outward causes for them, Freud devised a method of treatment called psycho-analysis where he would get patients to talk about early experiences, to get them to relax and explore the causes of the problem.He wrote volumes about his work and many followers of his methods refined them and some still employ the techniques as part of psycho-therapy.

Freud suggested that the human personality was derived from three interlinked components called **Id, Ego and Super-ego.** These acted as the motivating force for action and made judgements about whether such actions were possible and ethical. It is probably useful to think of them as three characters in the mind who have dialogues about what to do and when and whether we should do it at all.

- **Id** can be thought of as a demanding and impulsive infant who wants things now, won't wait and likes to be kept comfortable and happy at any cost. Freud says that Id operates on the Pleasure Principle and is driven by the forces of sex and aggression. Id has no sense of what is possible in reality and has no sense of ethical or moral responsibility for its actions.
- **Ego** is rather like the executive which keeps a rein on Id's demands, satisfying what is necessary and what is practical. It operates from the Reality Principle in that it does what is possible in the situation. It is in conscious control of the personality.
- **Super-ego** is like a judge making sure that whatever course of action Id and Ego take are within society's rules. It is much like a conscience in that it imposes society's standards morals and values on our actions.

When operating together Id is the motivating or driving force, Ego is the one who finds ways of making things happen to satisfy Id's demands and Super-ego passes judgement about the morality or ethics of such an act. Ego is in fact operating as a go-between balancing the power between the other two.

Psycho Sexual Stages

Freud theorised that the personality developed through several stages and that the core was formed before the age of six. These stages are concerned with the pleasure derived from erotic or sexual actions. Freud did not imply that children were sexually precocious but that different areas of the body give pleasure in childhood and continue to adulthood when the pleasurable feelings may be gained through different means. The stages were labelled, oral, anal, phallic, latency and genital, and Freud suggested that people could become fixated, or stuck, in any of them which were not resolved satisfactorily.

Oral Stage 0–1 years

The mouth serves as an intense pleasure source for most children because of the food and comfort they receive orally. An adult **fixated** in this situation will tend to receive pleasure orally and may overeat, smoke, chew gum, bite their nails or find other oral comforts. Freud even says this develops into such behaviours as gullible behaviour, (will swallow anything!) or those who are oral aggressive, who like to argue or who have biting sarcasm.

Anal Stage 1–3 years

At the age of toilet training two personality types can result. Those who 'hold on' and those who 'let go'. Harsh toilet training can cause either **anal retentive** or **anal expulsive** behaviours. Anal retentives tend to be obsessed with orderliness and cleanliness and are both stingy and obstinate, whereas anal expulsives are disorderly and destructive, often messy and sometimes cruel.

Phallic Stage 3-6 years

Children in this stage become physically attracted to the opposite sex parent. Boys vie with their father's affections for mother **(Oedipus complex)**, whilst girls try to compete with mother for father's affections **(Electra conflict)**. Girls are also thought to be envious of a boy's penis because they have identified with father more strongly than with mother **(penis envy)**.

Latency Period 6-13 years

Freud suggested that the preoccupation with sexual matters was put on hold during this period so that the child had a less torrid time compared to the first 6 years.

Genital Stage Puberty +

During puberty and later on, an upsurge of interest in sexual matters makes it a time of turmoil for most teenagers. Adult sexual relationships eventually take over after this period is resolved.

Even though most modern psychologists do not interpret this theory as literally as Freud intended, we can all probably think of a number of people who are perhaps fixated in any one of the stages. We won't ask you if you have anal retentive or expulsive tendencies!

Social Learning Theory of Personality

What Freud and most of the type and trait theorists seem to have disregarded is the impact of any given situation on a person. They have theorised that personality is enduring and relatively static despite changes in environment, whereas the social learning theorists argue that environment is one of the factors which contributes to changing personality.

Can you imagine a person who by nature is vary placid and sociable going through a trauma which alters their perception such as a car accident which renders them paraplegic? Changes such as these do tend to alter a person's personality. Therefore Social Learning theorists would argue that personality is simply a collection of learned reactions to an environment. When that environment alters markedly, so will personality.

Consider for example the trait of honesty. Many people if asked would say they were honest, but surely it is situation specific? You may return a lost wallet, but would you consider cheating at cards?

Perhaps you would if the stakes were high enough!

Most people are not aggressive or violent but ask any mother what they would do to protect their children and most would be prepared to kill to defend them. Doesn't this tell us that those traits we consider 'fixed' are fixed only when circumstances permit? In other words, we are cheerful as long as our environment continues to allow us to be optimistic and we could just as easily become pessimistic with enough bad events to sour our life.

Activity 54.

	Yes	No
Are you a violent person?	☐	☐
Are you an honest person?	☐	☐
Are you a loyal person?	☐	☐
Are you an optimist?	☐	☐
Are you outgoing?	☐	☐

Under which circumstances would any of these change?

Do you remember the film 'Indecent Proposal'? What circumstances changed the behaviours of the people involved?

Social Learning theorists are really modern behaviourists who believe that personality traits are learned when we are reinforced for certain behaviours. In other words, we learn to be hardworking, honest and loyal because either we have found it pays off, or there have been role models whose behaviours we copied who behaved this way.

However, people are not simply robots who act without thinking or according to a pre-determined plan. We use our experience and learning to interpret situations and on the basis of those interpretations, we act. Psychologist Julian Rotter proposes that there are three aspects to each situation which we consider:

1. The psychological situation
2. Expectancy
3. Reinforcement value.

Consider someone pushes up against us and makes us fall over **(psychological situation)**.

Probably we would consider the other person's motivation for pushing us before acting accordingly. Most of us would consider the consequences of hitting back. The other person may be bigger and stronger, in which case we could be hurt **(expectancy)**, ie, what are the consequences of this act?

Some of us may get a buzz out of hitting another and feel great, whereas others may have been taught that when you hit back, violence only escalates **(reinforcement value)**, ie, is it worth it?

Activity 55.

Consider the following scenario.

A person of the opposite sex comes up to you in class and throws their arms around you in a big hug.

How would you act, taking into account the psychological situation, your expectancy and the reinforcement value?

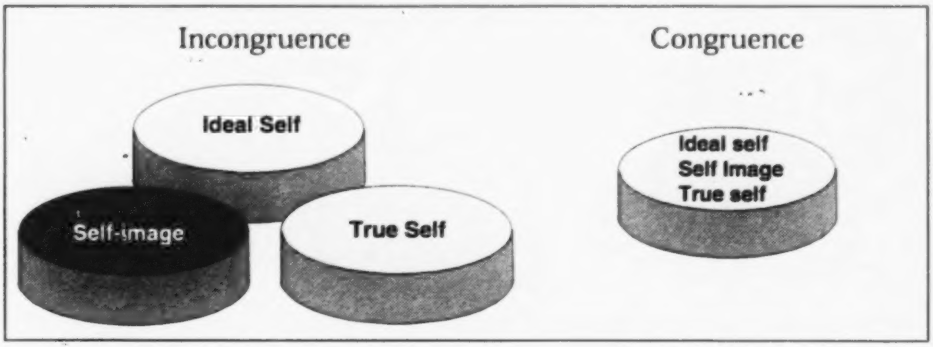
Discuss your ideas with other class members and note how each person has an individual interpretation of the situation. Does being a particular 'type' influence this situation or is the situation itself more important in determining how you act?

Carl Rogers – Self theory

Carl Rogers was a clinical psychologist who developed theories based on his own experience as a therapist. He believed that people who were well adjusted or, as he termed them, '**fully functioning**' were loved and accepted and trusted their feelings and intuitions. His theory of '**self**' suggests that we think of ourselves as having certain characteristics and that this belief leads us to act in certain ways. For instance, if we have a **self image** that we are a generous person we will act in a way which confirms this belief.

When there are vast differences between the self image and the **real self** as others see us, Rogers says we become **incongruent** or inconsistent. In addition to the true self we have an **ideal self** (who we would like to be). Those whose ideal self and self image are congruent, or similar, are better adjusted and more confident than those where there is incongruence, or discrepancies.

However, if the ideal self is unrealistic and the self image can never reach those goals there will be maladjustment.



Activity 56.

Consider a patient with anorexia. How could you explain this in terms of Rogers Self theory?

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Describe yourself in terms of:

Your self image or own personal view ____________________

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The real self as others see you ____________________

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____

The ideal self you would like to be ____________________

____

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Is there a mismatch between all three selves? How closely do your circles intersect?

Rogers says we develop feelings of self worth when our parents love us **unconditionally**. In other words, they continue to love us despite the fact that they may disapprove of our behaviour now and again. It is when we are told that we are not loved because we do something bad that we learn that parental love is conditional upon good behaviour. Many adults have low esteem because they learned early in their lives that love was only given when you were a 'good boy/girl'.

Those who have feelings of strong self worth have what Roger's called '**positive self regard**' or good healthy self esteem. You know you are someone who is worthwhile and can give and receive love. The more in touch you are with your feelings and the more you accept yourself the better adjusted you will be, according to Carl Rogers.

Other Influences on Personality

Alfred Adler, who was a follower of Freud, made an interesting discovery when he theorised that birth order may affect the personality of individuals. Have you ever noticed that older children and younger children in families have distinctive characteristics, and that middle children also are quite different from the eldest and youngest?

Adler suggests that birth order affects the way the children are perceived by parents and that their parenting style changes with each child therefore affecting the child's behaviour. Imagine being the apple of your parents' eyes for the first two years when suddenly a new little stranger claims all their time and affection. Adler says firstborns never get over being dethroned! He suggests they spend the rest of their lives trying to reclaim this power and authority and as a result, are often those who break new ground, show leadership, act as pseudo parent for younger children and in general are responsible in life. If you are an eldest, does this describe you?

Youngest children are often in a privileged position as the parenting style has relaxed, they have all the advantages the oldest child was probably denied and often they are spoiled and pampered. They develop as social beings who often don't grow up and continue into adulthood in their dependent role.

Middle children are often better at managing people due to balancing the demands of older and younger siblings but can often withdraw as the spotlight seems to be forever on the eldest and the youngest.

Only children can have the worst and best situation in that they have never suffered dethronement, have had full parental attention, but have had parents who expect a lot of them and who have not relaxed in their parenting style.

Activity 57.

Which place do you occupy in your family? Middle child, oldest, youngest, only?

Are you typical ?

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Conduct a class discussion about the typical attributes of birth order and how your experiences match Adler's theory.

Do you think that being a middle child could encourage the trait of competitiveness or being overly jealous? How may this develop?

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As you can probably now gather, personality is a complex concept which is often controversial and never static. Those who never change are probably in very rigid and unchanging situations whereby they never get the chance to be any different.

And yet there are probably enduring characteristics which we will carry to the grave and others which we will slough off like a snake losing its old skin when circumstances allow.

Activity 58.

Which THEORY seems to best account for why you are the way you are?

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Personality is an enduring set of characteristics which are relatively stable throughout life.	☐	☐
b)	Sheldon's body type theory suggested that ectomorphs were fat and jolly.	☐	☐
c)	Jung's theory of personality suggested that people were either extroverts or introverts.	☐	☐
d)	Cardinal traits are found in most people according to Allport.	☐	☐
e)	According to Carl Rogers people always see you the same way you see yourself.	☐	☐
f)	Freud suggested that personality was influenced by childhood experiences.	☐	☐
g)	Super-ego is like a judge who weighs up the moral issues in our actions.	☐	☐
h)	Adults who are fixated in one of Freud's psycho sexual stages, are likely to show behaviours which resemble childhood stages.	☐	☐

Answer in a sentence.

2. Describe how Freud's three sections to personality interact to produce behaviour.

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3. How does social learning affect personality?

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4. Describe how birth order can influence your personality.

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Fill in the gaps using the correct terms.

5. Carl Rogers __________ self is the person we would like to be.

6. If all three selves are similar we are said to be ____________________.

7. Adler says that ______________________________ influences personality.

8. Freud says that penis envy in little girls is part of the ____________________ stage

9. Cattell says that ____________________ traits describe the less stable parts of personality such as attitudes and beliefs.

10. ____________________ according to Jung seek out the company of others.

11. Muscular and athletically built people are known as ____________________ according to Sheldon.

12. The Greeks described people who were depressed as ____________________ personality types.

Unit 7 — Intelligence

Intelligence has always been a matter of great interest to many people throughout the history of Psychology and trying to ascertain what it is and how you can measure it is of particular interest. But why do we need to know how intelligent we are other than to satisfy curiosity or to measure our capacity to learn against that of somebody else?

Such thoughts occupied the professional working like of Alfred Binet who, as early as 1904, developed the first intelligence test for children. His task was to develop a test which would identify those children who had difficulty learning in normal French classrooms of the time. Binet achieved his aim but at the same time started a controversy which continues to this day about the nature of intelligence and whether tests actually measure it at all. He called the measure of intelligence he pioneered the IQ or **Intelligence Quotient**.

Other researchers are concerned with whether you can learn intelligence or whether you are born a genius and if a test can be devised which is culturally fair to all people.

Activity 59.

Take the short IQ test below in 10 minutes and compare your answers to those of your classmates. Your teacher will have the answers in the Teacher guide.

THE ORIGINAL AUSTRALIAN TEST OF INTELLIGENCE

(Write the appropriate word in the gaps below)

1. What comes next in the sequence, one, two, three, ____________?
2. How many lunar months are there in a year? ____________
3. As **wallaby** is to **animal**, so **cigarette** is to ____________
4. Three of the following items may be classified with **salt-water crocodile**. Which are they? *(Circle the right ones)*:

   marine turtle, brolga, frilled lizard, black snake.

5. Which items may be classified with **sugar**? *(Circle the right ones)*:

   honey, witchetty grub, flour, water-lillies.

6. We eat food and we ____________ water. *(Supply the missing verb.)*
7. Sam, Ben and Harry are sitting together. Sam faces Ben and Ben gives him a cigarette. Harry sits quietly with his back to both Ben and One of the men is Ben's brother, the other is Ben's sister's child. Who is the nephew?

   Sam?
   Harry?
   Ben?

8. Suppose your brother, in his mid-forties, dies unexpectedly. Would you attribute his death to:

   God?
   Fate?
   Germs?
   No-one?
   Someone?
   Your brother himself?

Activity 59 (Cont)

9. You are out in the bush with your wife and young children and you are all hungry. You have a rifle and bullets. You see three animals all within range — a young emu, a large kangaroo and a small female wallaby. Which should you shoot for food?

The young emu?

The large kangaroo?

The small female wallaby?

10. Why should you be careful of cousins?

How many questions did the class average?

The usual range is between one and three, and at least half of those are lucky guesses except of course, if you happen to belong to the Edward's River tribe of Aboriginal people in far North Queensland. Then you will probably get at least nine or ten correct because these things are automatically part of your cultural heritage.

When we refer to culturally fair tests we mean a test which does not discriminate either for or against a particular cultural group. We would not expect the tribal people of New Guinea to sit down and answer a paper and pencil test which relies on thinking skills which you learn in European schools and yet many Black Australians and Americans have been labelled as unintelligent under exactly these circumstances.

Intelligence is therefore more than simply book learning.

Psychologists think of intelligence as 'the global capacity to act purposefully and think rationally and to deal effectively with the environment'. This definition can include the thoughts and behaviour of someone who has never been to school or university, yet we tend to think of intelligent people as those who have degrees or who have been through some formal learning processes. This is not necessarily the case, as you will see.

Even so, there is still debate about what constitutes intelligence. According to a group of over 1,000 experts, intelligence includes at least these components known as cognitive abilities which include:

1. Abstract thinking or reasoning
2. Problem solving ability
3. Capacity to acquire knowledge
4. Memory

Adaptation to one's environment How does this differ from a special talent or aptitude? Some would say a special talent is one small part of global intelligence. One can have aptitude for mechanical things, or sport, art or music. Whilst these may contain cognitive components, they also include skills such as manual dexterity. Many intelligence tests of general ability broadly measure mathematical, language and thinking ability and therefore you would probably not pass because they rely on your ability to read, write, think and solve problems using techniques learned, for the most part, at school. The General Aptitude Test, or G.A.T., which is given to year 12 students in June is a typical test of general ability.

Can Intelligence be Learned?

You cannot accurately measure a child's IQ until about age 6. By then you can get a reasonably reliable estimate of intelligence. Scores on tests will increase gradually until about age 40 due to a person's experience, education and maturity in addition to the natural capacity they inherited genetically.

The rate at which you increase or decrease your IQ score can be due to a number of factors, such as environment, education, and the amount of stimulation you are exposed to. If you work in a dreary, dull job you will not gain much but those in a job which continually exposes them to new things will become more intelligent as a result. Your natural capacity may be great, but you need an environment which will stimulate to gain maximum benefit. Even children who are considered to be retarded, and therefore limited in natural intelligence, will maximise their potential in a rich, stimulating environment.

Therefore it is reasonable to assume that you can learn to be more intelligent as you grow older, unless illness or environment prohibits this. It is not until old age that a rapid decline affects our ability to function cognitively and modern thinking advises the 'Use it or lose it.' philosophy. Those with active minds usually stay that way for a long time, whereas those who are lonely and mentally inactive will soon lose their capacity to think productively.

Activity 60.

1. How many elderly people do you know who are slow and unable to think productively? Under what circumstances did this happen? Were they sharp once?

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2. How many active, mentally sharp elderly people do you know?

3. Do you think their lives affect their thinking abilities? If so, how?

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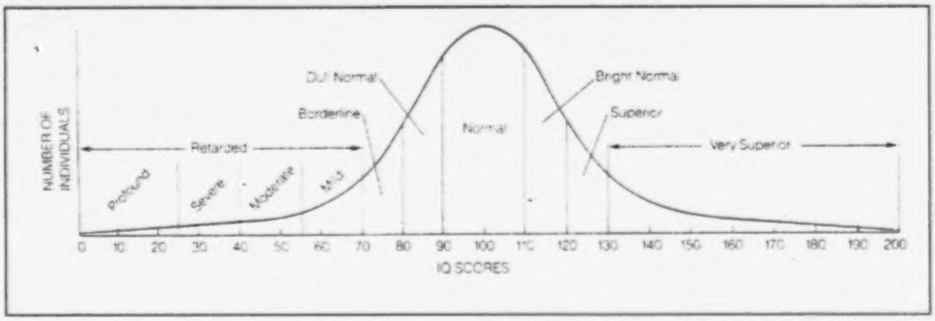
How is Intelligence Scored?

An IQ of 100 means that the person is average in thinking ability. A score of 120 means the person is above average and 85 is below. Approximately 68% of people will score between 85 and 115 in an IQ test and as the scores become higher or lower the percentage of people receiving that score decreases.

If you were to draw a graph representing thousands of people's IQ scores you would notice that it would result in what is known as a bell shaped curve which is illustrated below.



This graph shows that most people will score between 85-115, whereas only 4% of the population will score over 140 (superior intelligence) and about 4% are considered retarded.

The highest officially recorded IQ in America is 230, whereas a person who is severely retarded may score between twenty and thirty.

Levels of Mental Retardation

IQ Range	Degree of Retardation	Educational Classification	Required Level of Support
50-55 to 70	Mild	Educable	Intermittent
35-40 to 50-55	Moderate	Trainable	Limited
20-25 to 35-40	Severe	Dependent	Extensive
Below 20-25	Profound	Life support	Pervasive

(DSM-IV, 1994; Hodapp, 1994)
Source: Coon, D *Introduction to Psychology)*

IQ and Achievement

Does a very high IQ necessarily mean you will go to university and get a wonderful job? No, not always, but if a person discovers they have a gift for learning and increasing their chances in life, most would want to use it to their advantage. So there are a great number of highly intelligent people in very important jobs. However, the man with the highest recorded IQ in Australia is not one of those. He is a garbo in Queensland who still lives at home with his parents.

Activity 61.

How many bright people have you known who have not used their intelligence to full capacity and why do you think they have done this?

Is Intelligence Connected to Insanity?

Although this view is often reported it is a popular misconception that genius and insanity are close. In fact, in the 1920's a **longitudinal** study by Lewis Terman in the USA, showed that this was far from true. Terman studied a group of 1,500 children who were regarded as gifted because they all had IQ scores above 140.

These children were followed through school and later, as adults, were surveyed regularly. On average they were well adjusted, healthy and happy in their lives. Many excelled in their careers, raised families and lived fulfilling and interesting lives. They held down influential and important positions and took on leadership roles in their careers. They were above average in height and physical appearance, thus dispelling the 'weakling' stereotype wrongly associated with superior intelligence. The group suffered less-than-average mental illness, thus dispelling the links between insanity and genius. While some may think that intelligent people have no practical skills, the group between them produced thousands of inventions, wrote copious numbers of books, scientific articles, short stories and other publications. Therefore, the stereotype of the vague, nutty professor, is inappropriately applied to intelligent people in most cases.

How do you Identify Gifted Children?

Early warning signs of giftedness in young children can be:

1. Seeking out the company of adults or older children.
2. Being able to absorb information rapidly.
3. An early ability with problem solving
4. Talking in complete and more complex sentences at 2–3 years of age.
5. Early talents in music, art or maths.
6. Early reading ability. Can often read without being taught by age 3.
7. Early co-operative behaviour and empathy for others.

Giftedness in children is usually best identified by parents as teachers are not always good judges. Often, very bright children are so bored by the lack of stimulation around them that they become behaviour problems and some so called 'naughty' children are really very bright, and very bored. Teachers often find it hard to see these children as intelligent, and more often label the bright, average children as intelligent, thus mistaking co-operativeness and high motivation for intelligence. They would probably be shocked if told the IQ scores of some of these so called 'naughty' children.

Howard Gardner and the Seven Intelligences

Another view of intelligence is held by Howard Gardner of Harvard University in America. Gardner theorises that there are seven intelligences instead of the language, maths and problem solving ability we usually consider. Included in his list are:

1. Language
2. Logic and math
3. Visual and spatial thinking
4. Music
5. Bodily-kinaesthetic skills (dance or athletic ability)
6. Intra-personal skills (self knowledge)
7. Interpersonal skills (social abilities, leadership etc)

If Gardner is right, then intelligence tests will have to be extended to include more than the traditional thinking.

Activity 62.

How many people do you know who have gifts in any of these last 4 areas?

Do you think intelligence can be found in music or dance as well as maths and language? Discuss the possibilities with the group.

Can you think of sporting or musical personalities whose skills can be called gifted?

Were they high school drop-outs who were not geniuses in the traditional sense?

Is Genius Inherited?

In short, very high intelligence is more than likely a combination of native ability plus an environment with plenty of opportunity. Many children with high intellectual potential are born into underprivileged circumstances. In contrast, those children who come from privileged backgrounds have ample opportunities given to them because their parents can afford to give them the best in educational opportunities, travel, books, computers, tutors and the rest. These children can very easily maximise their native intelligence because of their home and school environments, whereas underprivileged children have to succeed without these advantages. Perhaps less privileged children have the motivation to succeed which drives them but even still, it is often difficult for them due to the barriers which inhibit their progress.

Tests have shown that the IQ of most children is moderately similar to that of their parents. It is closer for identical twins and strangely enough, even when identical twins are raised apart, their IQ scores remain similar. This seems to show that **heredity** plays a more important role than **environment** in determining IQ score. However, most separated twins are placed in homes which closely resemble the backgrounds of their natural parents and so their environments are likely to produce similarities in IQ. When raised in vastly different environments, twins reflect those differences in their IQ scores. These influences are said to be 50% nature (heredity) and 50% nurture (environment).

Intelligence and Family Size

There is a controversial view that the larger the family, the less intelligent subsequent children will be, and that the brightest children usually come from smaller families.

Activity 63.

Debate this issue in the class and try to come up with reasons as to why this may be or may not be the case.

Does this finding concur with your experience? How can a child maximise opportunities to become more intelligent in a small family as opposed to a large one?

Savant Syndrome

This peculiar phenomenon is the type of ability shown in the film 'Rain Man'. Those who show this extraordinary ability are also victims of mental retardation.

It is as though there is one highly developed area in the brain, whereas the rest is functioning subnormally. **Savant syndrome** shows itself as rare musical ability, mathematical ability for dates, numbers or even such things as cricket scores. These people seem to be able to work calculations very rapidly in their brain but they need institutional care for their everyday needs. Are such people really geniuses?

In comparison, some very bright people can have areas of their thinking where they are complete failures. Some academics have no mechanical aptitude and some mechanical geniuses may not be able to read. A rare talent or ability in a particular area does not necessarily have to be accompanied by overall ability. Such abilities can also be the result of thousands of hours spent in practising this skill.

In short, genius and intelligence are very hard terms to define precisely. If we find such a concept difficult to describe, then we can understand the difficulty that the experts have in trying to define them.

In conclusion, it is probably appropriate to give you a typical Intelligence Test and then get you to score it so you can see how the scores spread and are equated with normal intelligence.

Activity 64.

Take an IQ test in the allotted time suggested. After your teacher marks the tests he or she will convert the raw scores to an IQ score and write the scores on small sheets of paper with no names attached.

Organise the scores from the highest score to the lowest. This is called a range of scores. For example the range could be from 80–140.

Calculate how many people's scores fit into each section of the range.

80–99	100–109	110–119	120–129	130–139

Add up all the class scores and find the class average IQ (this is called the **mean**).

Which is the most frequently occurring score? (known as the **mode**).

What did you learn about taking an IQ test?

Was it a fair test of your ability? Why? Why not? Discuss this with the class.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Intelligence tests can be culturally biased.	☐	☐
b)	People can learn to be more intelligent as they grow older.	☐	☐
c)	Children as low as 4 can be tested accurately for intelligence.	☐	☐
d)	The mean score for intelligence is around 50.	☐	☐
e)	Geniuses are often found to be insane.	☐	☐
f)	Identical twins always show similar IQ results when they have been raised together.	☐	☐
g)	All people with very high IQ scores are well adjusted and have powerful jobs.	☐	☐
h)	Gardner says that there are seven intelligences.	☐	☐

Answer in a sentence.

2. Define intelligence according to a psychologist's view.

3. According to the experts, which cognitive abilities are involved in intelligence?

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4. Describe how you would identify a gifted child.

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Fill the gaps using the correct term.

5. Tests which discriminate against some races are said to be culturally ______________ tests.

6. ______________ are better able to judge gifted children than the classroom teacher.

7. Gardner's ________________ skills are those which show self knowledge.

8. The average IQ score for any group will be ________________.

9. The standard distribution of IQ scores is shaped like a ________________.

10. Many intelligence tests rely on language, maths and ________________ ability.

11. Teaching yourself to read at age three would be considered as a sign of ________________.

12. Terman's ________________ study followed gifted children and adults all their lives.

Unit 8 – Developmental Psychology

Developmental Psychology is the study of how progressive changes in behaviour and abilities take place as a person matures throughout the life span. We can chart normal behaviour and milestones by studying what most people do at various ages and stages in life.

For instance, there are normal ages at which we begin to walk, talk, go to school, enter puberty, form relationships with partners, go to work or to university, have children, have a mid-life crisis and retire! There is an age range for these activities to occur. For example, it is normal for children to walk alone between the ages of 9 to 18 months. Should a child not begin to walk alone until three years we would suspect some abnormality. It is to establish these benchmarks for normal behaviour that Developmental psychologists conduct research.

Let us begin by looking at some of the famous research which has led us to understand which behaviours are appropriate for each age and stage we pass through.

Neonatal Behaviours

Neonates is the term given to babies up to one month old. Babies come equipped to survive under many circumstances and are not the helpless little creatures we often imagine them to be.

Activity 65.

Answer True or False to the following questions about what babies can do.

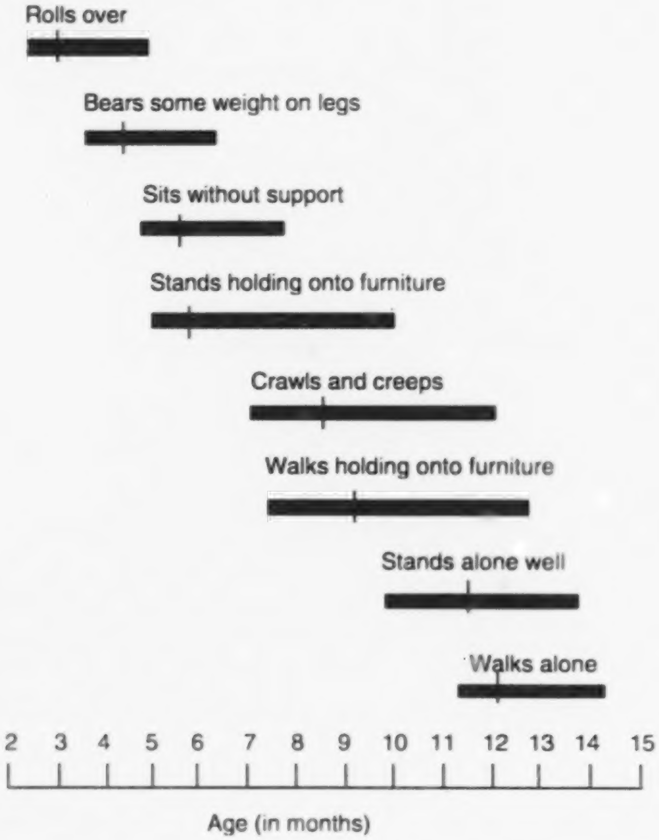
Tick ☑ the appropriate box.

		True	False
1.	Neonates can feel pain.	☐	☐
2.	Neonates can follow a moving object with their eyes soon after birth.	☐	☐
3.	Neonates prefer mother's face to others very soon after birth.	☐	☐
4.	Neonates can smell the difference between their own mother's milk and that of other nursing mothers.	☐	☐
5.	Neonates cannot initially see in colour but can do so by 4 months.	☐	☐
6.	Depth perception takes at least 4–6 months to develop properly.	☐	☐
7.	Neonates can discriminate between sweet, sour and salty substances.	☐	☐
8.	Neonates can walk at birth if you hold them upright.	☐	☐
9.	Neonates can grasp something very firmly in their hands.	☐	☐
10.	A neonate can tell the difference between mother's voice and that of another woman.	☐	☐

If you haven't already guessed, all of the answers are true. Because babies come equipped with a large repertoire of **reflexes** to protect them and quite sophisticated sensory abilities, they can quickly learn to respond to mother and survive despite difficult circumstances. How often do we hear about babies surviving under mounds of rubble after accidents even after a week without food?

Toddlers

Toddlers are those who have learned to walk. Children after about nine months have passed through the various stages of sitting alone, crawling and eventually walking unaided. The chart below shows the various ages and stages children pass through.



At the same time as toddlers are mastering the physical steps they are probably learning to talk. Speech begins long before any child says one word and from birth they are tuning in to language and tone of voice. Their ability to talk starts with one word utterances and proceeds to two and three word sentences until at about age four they can converse in 5-6 word sentences. Speech onset can be retarded by ear infections but usually takes place by age two and follows the same basic progression no matter what language the child is raised in.

Children are born with the ability to make any speech sounds but will fine tune the ones they use depending on the native speakers who surround them. It is easy for a small child who grows up in a bi-lingual household to learn two languages at once as they are learning them simultaneously in a natural setting.

Attachment Theory

Attachment is the concept whereby an infant develops a close and affectionate bond with its primary caregiver early in life. Whilst these close bonds are usually formed with the infant's parents, other bonds can develop with people such as grandparents, older siblings or a child care worker. These early bonds develop as infant and caregiver form an interdependent relationship and usually the infant will seek that person as their main source of comfort above all others, although anyone who will give them comfort is usually able to be substituted successfully.

At around 6-8 months the child is no longer willing to accept comfort from a substitute caregiver and will cry when the primary caregiver leaves them. This emotional attachment is said to form the basis of later relationships and lack of attachment at this crucial stage can lead to relationship disfunction later in life. In other words, those who do not learn to love and trust in infancy are likely to be incapable of loving, trusting relationships in later life.

One sign that infants are securely attached to their caregivers is when they display either stranger or **separation anxiety**. In the presence of strangers, securely attached infants of about 8 months will cry and, if separated from their primary caregiver at around 12 months, they will be very upset. Those who are not securely attached seem to display less fear of strangers and separation at similar ages.

In 1958 British child psychiatrist, John Bowlby, formed the theory of attachment. He emphasised the fact the both infant and caregiver were part of a very strong relationship and that mothers were the ideal **primary caregivers**. Bowlby suggested that the first year of a child's life was crucial for attachment and that those who did not form secure attachments were less likely to have secure adult relationships. Bowlby's work in juvenile centres and prisons led him to believe that the lack of attachment was common in offenders.

Activity 66.

How do you feel about sending children to child care considering Bowlby's findings?

Do you think mothers are the only people to whom infants can attach?

Debate the issue in class and argue that there are more or less advantages for children in care or at home.

It would be easy to accept Bowlby's views as many people believe that mothers should stay at home for their children's formative years, but some mothers, for a variety of reasons, cannot spend all their time at home. It is more likely infants will form a strong attachment with their primary caregiver but that they will adjust readily to others who give excellent child care in a stimulating situation. It is the quality of the attachment relationship which matters and not the amount of time you spend with a child which decides whether the child feels secure. Both fathers and mothers can be figures of attachment for children.

Social Development

In another landmark experiment in the 1950's and 60's in America, Harry Harlow worked with Rhesus monkeys and showed us how the lack of mothering affected the way young monkeys developed.

Harlow raised Rhesus monkeys in a cage with a wire surrogate mother and a wire mother covered over with soft terry towelling. Both 'mothers' had formula bottles protruding from the chest area for feeding. The infants would cling to the cloth mother and spent longer clambering over her than the wire 'mother.' Harlow concluded that the contact comfort with the softer mother provided more security than the wire mother despite the fact that all the monkeys gained weight and drank similar amounts.

Wire and Cloth Mothers

An infant monkey clings to a cloth-covered surrogate mother. Baby monkeys become attached to the cloth 'contact-comfort' mother but not to a similar wire mother.

This is true even when the wire mother provides food.

In a later experiment, Harlow reared baby monkeys is isolation for either 3, 6 or 12 months. The first group became emotionally disturbed and could not relate well to other monkeys when they were put into normal situations. However, after 12 months of normal interactions their behaviour returned to normal as they adjusted to social activities.

The second group were severely withdrawn and showed self destructive tendencies. They took longer to recover from their isolation than the first group but eventually recovered. The third group never recovered fully and showed inappropriate mating behaviour and severe social problems.

Harlow's experiments have been generalised to assume that similar behaviours would occur in humans who were exposed to similar situations as the monkeys. Our understanding of the importance of attachment and the necessity of **socialisation** was made clear following Harlow's important discoveries.

Cognitive Development

The work of Jean Piaget (1896-1980) in the earlier part of this century was the basis for much of what we know about the intellectual or **cognitive development** of children. Through studies of his own children, Piaget showed us how children pass through various stages during which they learn in different ways. Later theorists have refined many of Piaget's concepts, but his basic principles have remained.

Piaget suggests that children progress through four distinct stages:

1. Sensorimotor stage (birth - 2 years)
2. Pre-operational stage (2-7 years)
3. Concrete operational stage (7-12 years)
4. Formal operations (12+ years)

1. Sensorimotor Stage

Piaget suggests that most children in the first two years learn through their senses. It takes at least the first two years to integrate the senses and to co-ordinate movement. The most important feature of this stage is that infants learn that something is still there even if you hide it beneath a cover or look away. He called this **object permanence**.

Activity 67.

You may like to invite a mother and her baby of less than 9 months old into class and try this activity and record your findings.

Select a favourite toy and play with the child showing them the toy. Cover the toy over with a blanket and see whether the child tries to retrieve the toy or just gives up interest. (For little babies, out of sight means out of mind!)

Children of between 7-12 months should have developed the ability to see objects as permanent. Toddlers also can set goals and carry them out according to Piaget. They can see an object and climb to reach it or work out a way to achieve what they want.

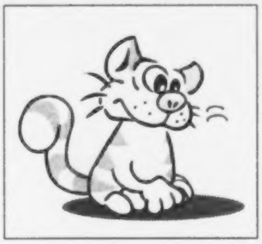
2. Pre-Operational Stage

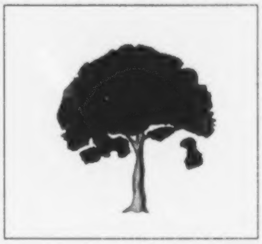
Following on from the former stage Piaget says that children enter a stage of thinking where language is more sophisticated and therefore thinking is too. Children in this stage are **egocentric**. Piaget does not imply they are selfish, but unable to see the world from another person's point of view. For instance, if you sit at opposite sides of a table looking at a toy car which is facing them and ask them what they see. they will answer correctly that they can see the car headlights. If, however, you ask them what you can see from your angle, Piaget says they cannot perceive the car from your view. They think what you can see is the same as their viewpoint.

To try many of the following activities it may be appropriate to organise a visit to a school to try some of the activities on young children. Make sure you have the appropriate permission from parents and the school authorities.

Activity 68.

Try this activity with a child aged between 2-7 years old.





Draw pictures on the front of a number of cards and others on the back.

Show the child **both** sides and ask 'What can **you** see?', and then, 'What can **I** see?'

Record how many times they can identify your position correctly.

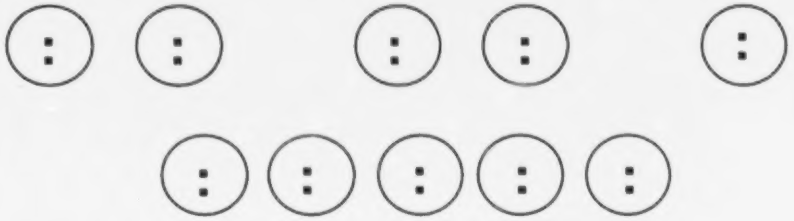
What can you conclude about their egocentricity at various ages?

Children in this stage also have difficulty in realising that materials change **state**. For instance, they would have difficulty imagining that ice becomes water and can be frozen into ice again. They also have problems with reversibility, in that if you ask Justin if he has a sister, he can correctly answer that Lisa is his sister. If you then ask if Lisa has a brother, he cannot answer that he is her brother.

In addition, they have difficulty with the concept that objects can have more than one quality at a time. For instance, a ruler can be thin and long. By being able to focus on only one quality at a time children have difficulty with activities such as those shown below.

Activity 69.

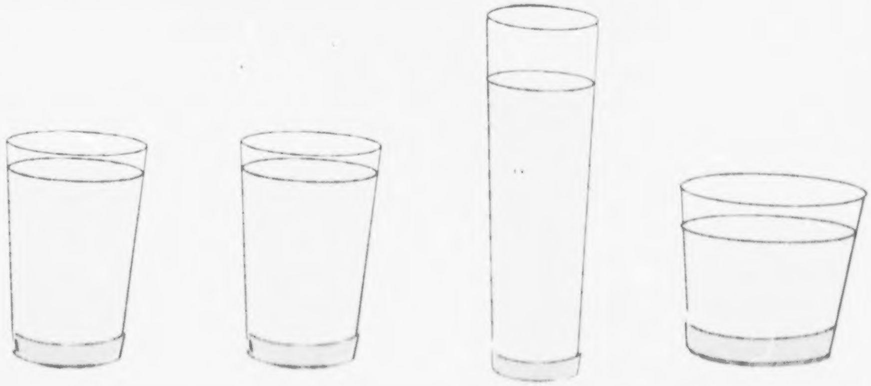
1. Show a child two rows of five buttons. Now make one of the rows into a group. Ask the child, 'Which has more buttons?'



2. Show a child two identical sausages made of play dough. Now roll one into a ball. Ask the child, 'Which is the biggest?'

2. Show the child two identical glasses with the same level of water in them. Have two further empty glasses one tall and thin and the other short and fat.

3. Pour water from both identical glasses into each of the others and ask the child, 'Which has the most water?'



Discuss your findings with other members of the class.

3. Concrete Operational Stage

Children in this stage become more sophisticated in their thinking in that they no longer have problems with the activities tried previously. The process of **conservation** is the name Piaget gave to the sorts of reasoning tasks we have just tried. They are also able to successfully classify objects according to their various properties.

Activity 70.

Give a 7-12 year old a group of objects to classify into groups. These can be an assortment of everyday household objects and you will need about 30 different things.

Children of this age should be able to classify into various groupings such as function, colour, size, shape, type of materials etc.

Make a list of the number of different classifications they suggest.

Children at this stage in cognitive development are slowly moving to more abstract thinking required for the next stage.

4. Formal Operations

At the age of 12+ children start to develop more abstract concepts which are more complex. They can manipulate ideas in their heads such as mathematical ideas and can also understand less tangible concepts such as death. Their thinking is characterised by logic and they have an ability to look forwards and backwards with understanding.

Piaget's theories have given us a basis upon which to understand children's behaviour as well as insights into their intellectual development. Despite the fact that many researchers since have revised and refined what Piaget said, his theories had a marked influence on our understanding of this area of psychology.

Erikson's Psychological Theory

Erik Erikson (1903-1994) developed a theory about human ageing and how life stages affect development. Erikson summed his eight life stages up by describing them as dilemmas.

Stages	Dilemma
0-1	Trust versus mistrust
1-3	Autonomy versus shame and doubt.
3-5	Initiative versus guilt
6-12	Industry versus inferiority
Adolescence	Identity versus role confusion
Young adulthood	Intimacy versus isolation
Middle adulthood	Generativity versus stagnation
Late adulthood	Integrity versus despair

1. Trust Versus Mistrust

In their first year babies learn to trust when they learn that others will give them warmth. love and physical care. Caregivers who do not provide these, have children who cannot achieve successful relationships are insecure and suspicious in later life.

2. Autonomy Versus Shame And Doubt

Children in this stage have a great desire to do things for themselves and gain self esteem through their autonomy. Those parents who ridicule the child's less than perfect attempts will often make them feel ashamed and doubting their own abilities.

3. Initiative Versus Guilt

Children learn to initiate activities which expand their experience. If parents are critical, or impose limitations on children's development, they may grow up feeling guilty about their activities.

4. Industry Versus Inferiority

A child's introduction to the world outside home at school provides experiences which can give the child a sense of achievement through industry. The praise they receive for their good efforts can build a sense of worth, whereas criticism for efforts can result in feelings of inferiority.

5. Identity Versus Role Confusion

Erikson says that adolescents struggle at this stage with the question of 'Who am I?' Bodily changes, combined with different roles, make this a confusing time. Adolescents must emerge from this with a clear sense of self and future according to Erikson.

6. Intimacy Versus Isolation

When a young person establishes a clear identity they want to engage in a meaningful relationship with others. Intimacy refers to the ability to share experiences and care about others and people who do not develop this intimacy will feel isolated.

7. Generativity Versus Stagnation

By generativity, Erikson means that adults need to be involved in the welfare of others, including their own children, and the community. Productive or creative work which is of benefit to all leads adults to believe that their lives are meaningful.

8. Integrity Versus Despair

When an adult has lived a rewarding and productive life where the care of others has been important, Erikson says they can face their own ageing with acceptance and satisfaction. Those whose lives have been immensely unsatisfying will face the future with despair. They see life as a set of lost opportunities instead of being fulfilling .

Activity 71.

Interview an older person about how they view their lives and make a decision about whether they feel integrity or despair.

OR

Interview some adolescents about their feelings of role confusion versus identity.

Discuss the issue that the first year of life can produce feelings of mistrust or trust.

Despite the fact that our lives do not all proceed according to such a set pattern, many people can identify with the broad progression which Erikson outlines. More recent researchers have refined and added to Erikson's theory but his basic concepts remain.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ☑ the appropriate box.

		True	False
a)	Neonates have a variety of reflexes for survival.	☐	☐
b)	Children learn to sit, crawl and walk at the same age.	☐	☐
c)	Bilingual children have more trouble learning the second language than the first.	☐	☐
d)	Separation anxiety is shown when children are not securely attached.	☐	☐
e)	Attachments can only be formed with the mother.	☐	☐
f)	Harlow showed that the cloth monkey substitute gave the monkeys more comfort than the wire mother substitute.	☐	☐
g)	In the pre-operational stage children cannot understand abstract thinking.	☐	☐
h)	Identity versus isolation is connected to adolescence in Erikson's view.	☐	☐

Answer in a sentence.

2. What does Erikson mean by integrity versus despair?

____

____

____

3. Describe a neonate's sensory abilities soon after birth.

____

____

____

4. Describe the behaviour of Harlow's monkeys who were raised in isolation for 12 months.

____

____

____

Fill the gaps with the correct terms.

5. Adolescents struggling with the 'who am I?' question are really sorting out the _________ versus _________ stage of development.

6. Children learn to talk using _________ word utterances to begin.

7. Attachment is the bond between caregiver and ______________________.

8. Piaget's ______________________ stage is from birth to 2 years.

9. Object ______________________ is when children know something exists despite it being out of sight.

10. Children are ______________________ when they cannot see the world from another's viewpoint.

11. Being able to conceive that objects have more than one quality is a function of the ______________________ stage.

12. In the stage of formal operations children are more ______________________ thinkers and can also think in a more abstract way.

Unit 9 — Psychopathology

Psychopathology is the name given to disorders which afflict behaviour, either mentally or emotionally. People who are , mentally ill cannot behave in a way which fosters well-being either for themselves or society. These disorders range from depression to full blown psychotic illnesses such as schizophrenia and chances are that one out of every hundred people will be so ill that they will require hospitalisation for some form of mental illness in their lifetime. Therefore mental illness is quite common and is an issue which is important for our society. Even though our methods of treating the mentally ill have changed markedly over the ages, we still have problems in providing satisfactory treatment and rehabilitation.

Mental illness has always been something which most people cannot understand. Fear and ignorance associated with illnesses, such as schizophrenia, make it difficult for many to accept sufferers as having something worthwhile to contribute to society. Because many mentally ill people cannot hold down a full time job, and may be dependent on welfare, this puts them in a double jeopardy as they are often poor and sick. In our society, struggling with both poverty and illness does not give you much chance of success.

What is your present view of those who are mentally ill ?

Diagnosis

When a person presents with certain symptoms and tells a doctor that they are having trouble with carrying out normal everyday functions, they are likely to be referred on to a psychiatrist in either private practice or in an institution.

All symptoms have been classified according to a world wide system known as the DSM IV or **Diagnostic and Statistical Manual of Mental Disorders Volume 4**. This is almost like a dictionary of disorders which describes typical symptoms and helps health professionals to choose appropriate therapies.

Some of the major categories include:

1. Schizophrenia and other psychotic disorders
2. Substance related disorders
3. Mood disorders
4. Anxiety disorders
5. Dissociative disorders
6. Sexual and gender identity disorders
7. Somatoform disorders
8. Personality disorder

There are many other categories but for an overview of this huge area we will look at each area briefly.

Activity 72.

What do you know about schizophrenia?

If you have had any dealings with people who have suffered from mental health problems share your experiences with the class.

1. Schizophrenia and Other Psychotic Disorders

One of the most serious mental illnesses is schizophrenia which is often misunderstood because people confuse it with 'split personality', the common term for multiple personality disorder, where a sufferer exhibits a number of personalities (discussed later).

Schizophrenia is a **psychotic** disorder which involves withdrawal from reality, delusions, hallucinations and disturbed emotions.

Delusions are false beliefs. The patient may believe they are someone important like Jesus (delusions of grandeur), or that someone is trying to get them (delusions of persecution), or that they are being controlled by someone else (delusions of influence).

Hallucinations are experiences which, although real to the patient, cannot be attributed to actual experience. They may hear 'voices' talking to them which tell them what to do or feel insects crawling over their skin. They may smell things, taste things or see things but the experiences are vivid imagination and not based on real sensations.

Disturbed emotions are shown when there is inappropriate reaction to outside events. They may be either highly agitated or devoid of emotional expression or may swing from one to the other.

Other symptoms may include disturbed communication. 'Word Salad' is the typical garbled phrasing of psychotic patients. It seems like communication but is merely a list of unrelated phrases put together.

> *The lion will have to change from dogs into cats until I can meet my father and mother and we dispart from rats .. It's all over for a squab true tray and there ain't no squabs, there ain't no men, there ain't no music, there ain't nothing besides my mother and my father who stand alone upon the Island of Capri where is no ice. Well it's my suitcase sir. (Rodgers, 1982)*

Source: Coon, D. '***Introduction to Psychology***', p 540

When psychosis is evident, the personality becomes disintegrated and the patient's behaviour is seriously impaired. They have trouble with selective attention, thoughts, memory and actions and even though this is usually for brief episodes, up to a month, it can be hard to keep life together. Often the patient becomes aware of the onset of an impending episode which can be caused by stressful events.

Schizophrenics can exhibit different types of the illness and many experts believe that it is probably a group of illnesses rather than just one. Patients often exhibit many of the symptoms or just a few.

As yet we do not know the exact causes of the disease but there are many possibilities.

1. Pregnant women who have flu in mid pregnancy are exposed to a higher risk of producing schizophrenic children than healthy women. Perhaps the virus interferes with brain formation at a critical period thus leaving a weakness for such illnesses later on.
2. Some say that early psychological trauma plays a part in making you vulnerable to such illness later in life but not everyone who suffers in this way becomes ill. Those who live in troubled families run a higher risk than those who do not.
3. Heredity seems to be the best predictor of schizophrenia as identical twins have a 46% chance of developing the illness if one gets it. If both parents have the disease then children have a 46% chance of developing it. If you have one parent who suffers, then you have a 13% chance of developing the illness.
4. The action of a brain chemical substance called dopamine also plays a part as researchers have established that the illness mimics the psychedelic trips caused by some drugs.

When we take all these factors into account we can see that a combination of heredity and environment may play a part in the onset of this disease.

Professor E Fuller-Torey who has written widely about schizophrenia, suggests that if 100 people developed the disease, one third of them would make a full recovery after a single episode, another third would make a recovery but would need drug therapy to assist and the final third would probably not be helped by medication, would need constant attention and would probably be unable to lead a productive fulfilling life.

Activity 73.

Collect newspaper cuttings about schizophrenia and make a display on the notice board of relevant articles.

Note how the community readily labels negative behaviour as 'schizophrenic' such as in the tragic episode at Port Arthur.

Organise a speaker from the Schizophrenia Fellowship of Victoria. This non profit group provides a valuable service to patients and families and will give talks to community groups on request.

2. Substance Related Disorders

This category of mental disorders relates to the abuse of substances such as drugs and alcohol. Problem behaviours which follow substance abuse may take the form of addiction, sleep problems, health problems as the substances degrade the body's organs and the inability to function properly at home or at work.

Activity 74.

Invite a speaker from the local Drug and Alcohol centre to speak to your group about the nature of substance abuse and the various withdrawal programs they use.

Each member of the group could research a particular substance and give a small presentation to the class under the following headings:

Type of substance

How it is used

What its effects are on mind and body

How long the effects last

Activity 74 (Cont).

Long term symptoms on the body

Psychological or physical addiction?

What is the difference between these? Explain.

3. Mood Disorders

Mood disorders are those which are characterised by changes in emotion or affect as it is known in psychology. The extremes are both manic or highly agitated, hyperactive and aroused and at the opposite end, depressive which is feeling hopeless and miserable.

Some patients swing from one to the other, known bi-polar disorder, and the states can last anything from hours to months. Most however, (10-20% of the adult population) seem to be affected by Depressive disorder and women are more susceptible than men. Depression can be the result of a chemical disturbance in the brain but is probably the reaction to something in the environment, such as problems with a relationship, work or the family. Chronic depression, or that which has no environmental cause, is more likely to be a biological factor and modern medications can alleviate the symptoms. The group of drugs known as anti-depressants are those usually prescribed for medication.

Activity 75.

Consult a reference book which gives you the drug names and what they are prescribed for.

'The Penguin Consumer Guide to Medicines' is one such publication.

Look up the terms **Antidepressants** or **Monoamine Oxidase Inhibitors** or **Tricyclic Antidepressants** and read what the book says about all aspects of the drug use. Share this information with the rest of the class.

If anyone in your circle of friends has taken this form of medication, please comment on its effects.

Of course taking medication for a medical condition you cannot resolve is quite acceptable for most of us but taking medication long term for something such as an abusive relationship does not really address the problem. These types of depression need to be treated with proper counselling so that the patient can eventually make changes in their lives to combat further depressive episodes. Taking drugs is only a bandaid solution to an ongoing problem.

4. Anxiety Disorders

For most patients suffering anxiety, the extent of their anxiety is usually out of proportion to the situation. Most phobias and related disorders have similar symptoms in that the patient feels overwhelming panic and thinks they will die if a certain thing happens to them. Most people feel a certain amount of anxiety in relation to certain situations, but it does not stop us from doing what we want to do, whereas someone suffering a disorder will have their life severely disrupted. Many suffer generalised anxiety whereby they worry about everything in their lives. The anxiety makes them feel clammy and sweaty, makes their heart race, makes them feel nauseous and makes them breathe rapidly.

A panic disorder is characterised by attacks which paralyse the person with such fear they feel they are having a heart attack or going insane. Symptoms include, palpitations, chest pain, feelings of choking, and perhaps vertigo or losing control. These symptoms occur without warning and leave the sufferer feeling vulnerable and frightened to do anything in case it occurs. When accompanied with agoraphobia patients feel that the attack will occur in a public place with the result that many are too scared to leave the house. Ordinary agoraphobics feel they will have something embarrassing happen to them in a public place. Such things as diarrhoea, shortness of breath or dizziness make them feel they would be safer inside their own homes.

Specific phobias are those related to a particular object or animal or situation. Many people are frightened of dangerous objects, such as spiders and snakes, but in fact often a phobic's fears are irrational. Has anyone ever died of a Daddy-long-legs bite? Phobics cannot live their lives without severe disruption and will often go to great lengths to avoid their feared object .

Activity 76.

Some common phobias have been listed below. Try to discover what people are frightened of, if they suffer from the following:

ASTROPHOBIA ______________________

ARACHNOPHOBIA ______________________

AVIOPHOBIA ______________________

CLAUSTROPHOBIA ______________________

HEMATOPHOBIA ______________________

MICROPHOBIA ______________________

NYCTOPHOBIA ______________________

PATHOPHOBIA ______________________

PYROPHOBIA ______________________

SOCIAL PHOBIA ______________________

XENOPHOBIA ______________________

ZOOPHOBIA ______________________

Do you suffer from a phobia? Describe how it feels when you come in contact with your fear.

____

____

____

____

Obsessive-compulsive disorder is another anxiety disorder characterised by persistent thoughts which intrude into the person's mind (obsessions), which give rise to irrational and repetitive acts (compulsions). Typical compulsive behaviours are washing of hands (cleaners), and seeing if you have turned off the gas or locked the door (checkers). People who are afflicted with this disorder may repeat these actions hundreds of times because their irrational thinking leads them to believe the ritual may somehow help control the obsessive thoughts.

Obsessive thoughts are frequently about cleanliness and patients feel that they can never be free of germs and wash everything they touch for fear of being contaminated. Howard Hughes, the wealthy Hollywood film producer and aviator, had this disease and would not handle a spoon unless it was wrapped first in two layers of tissue. Other obsessions can relate to violence or committing immoral acts. Patients develop compulsive behaviours to control these unwanted thoughts. Those who have a mild form of the disease are prone to cleanliness, orderliness and rigid routine which helps them to overcome their anxiety.

5. Dissociative Disorders

This rare disorder is also known as multiple personality disorder and is frequently the result of traumatic events in childhood or later life. Those who are afflicted develop the ability to dissociate themselves from the situation and, as a result, several quite separate personalities emerge from the one person. Each has distinct thoughts, actions and sometimes ways of speaking and special talents. When one of the personalities takes over the body, the real person experiences a fugue or lapse in memory which is a form of amnesia. This escape mechanism often helps the real identity cope with an intolerable situation, such as sexual or physical abuse, so that only a small part of the whole personality suffers. When the real identity assumes control of the body the amnesia for that period stops them from being overwhelmed by anxiety.

Activity 77.

An excellent film version of this disorder can be seen in the true case of 'Sybill' a young lady who assumed 16 separate personalities after suffering torture and abuse by her mother. The film deals with her story and her therapy and is well worth watching in class.

6. Sexual and Gender Identity Disorders

These disorders are those related to gender identity where a person's physical appearance may not match that of their psychological makeup. In other words a man may think he is a woman because he shares the same emotions, behaviours and thoughts but to all outward appearances he has a man's body. Such people may opt for sex-change surgery so that their physical and psychological characteristics match. Homosexuality, although it was once, is no longer considered a sexual disorder as people who have a same sex preference have no pathology in their behaviour and can lead fulfilling and normal lives .

However, a number of paraphilias associated with sexual disorders such as fetishism, a preoccupation with objects for sexual pleasure, exhibitionism, often manifested in the actions of 'flashers' and voyeurism, or getting sexual excitement from watching others engaged in sexual activity, are all considered disorders. Others include sexual **sadism** and **masochism**, **transvestic fetishism**, and **pedophilia**.

7. Somatoform Disorders

This is an unusual type of disorder which is characterised by physical symptoms such as blindness, paralysis or pain which cannot be attributed to any underlying cause. It is felt that psychological causes are the reason because the symptoms are quite real and can be tested. The term hypochondria is often associated with such disorders.

8. Personality Disorders

Personality disorders are those which have become entrenched ways of behaving over a long time. They are maladjusted ways of behaving due to a variety of factors which cause either a mild or severe degree of impairment to functioning. Moderate impairment categories include dependent personalities who are extremely submissive and dependent on others for approval, histrionics who are attention seeking and over-emotional, narcissists who are named after the Greek god of self love, and anti-social personalities who are charming, deceitful and reckless and often without feeling for others. Studies show that anti-social personality disorder accounts for a large number of people in jails. They appear to be poorly socialised, unemotional and are often lacking in conscience. They are reckless, impulsive and selfish and incapable of deep feelings such as love. Although many often finish up in jail some who are charming and deceitful can often 'con' their way through life and can become successful businessmen, politicians and the like. Their brain wave patterns show an unusual characteristic in that they appear to be under-aroused and needing high levels of stimulation to get a thrill.

Activity 78.

Quite often in the press there are articles about people who display Anti-social tendencies. Many famous cases have been publicised when fraud and other crimes are brought to light. Make a display of such cases in a cutting display on the notice board.

Moderate impairment includes **obsessive-compulsive disorder** which is characterised by a desire for perfection, orderliness and rigidity of routine. The **schizoid** personality is one who has no interest in maintaining a close personal relationship with anyone. An **avoidant** personality is so timid they avoid social contact or find extreme discomfort in social situations.

A severe degree of impairment includes such problems as **borderline** personality disorder where the person is very unstable and cannot sustain relationships or control moods or impulses. A **paranoid** is someone who sees others as distrustful with sinister motives. A **schizotypal** personality is very disturbed and extremely odd in behaviour but not quite at a psychotic level.

As you will no doubt be able to see, the whole subject of psychopathology is fascinating and vast. This is only a brief introduction which will give you some insights into the psychiatrist's world, but be wary of applying a diagnostic label to someone without knowing the subject. Remember it takes a psychiatrist over ten years to become fully qualified to diagnose mental illness and we can't expect to do so after just one or two classes.

Even psychiatrists can get it wrong sometimes!

Activity 79.

How should the mentally ill be treated in our society?

Should they be locked away or should they be free to live a life as they wish? Write your views below.

Check your Understanding

1. Are the following statements 'True' or 'False'?

Tick ✓ the appropriate box.

		True	False
a)	Schizophrenia means split personality.	☐	☐
b)	The DSD4 is a diagnostic manual of mental disorders.	☐	☐
c)	Hallucinations are typical symptoms of psychotic disorders.	☐	☐
d)	Schizophrenia is mainly caused by a genetic disorder.	☐	☐
e)	Affect disorders are the same as mood disorders.	☐	☐
f)	A phobia to dogs is a specific anxiety disorder.	☐	☐
g)	Fugue is a part of dissociative disorder similar to amnesia.	☐	☐
h)	Anti-social personalities are often considered to be cruel and heartless.	☐	☐

Answer in a sentence.

2. A somatoform disorder is

3. A gender identity disorder means

4. A typical phobic reaction occurs when

____

____

____

____

Fill the gap with the correct term.

5. A ____________________ person is distrustful of others.

6. Cleaning hands and checking items is typical of ____________________ disorder.

7. When psychotic patients talk in garbled phrases it is known as ____________________

8. Addiction is related to ____________________ disorder.

9. Bi-polar disorder means that patients moods swing from ____________________ to ____________________

10. ____________________ is a fear of being in a public place.

11. ____________________ is the correct title for split personality.

12. Being overly dependent on others is a ____________________ personality impairment.

Answers to Learner Activities

Unit 1

1. All the answers are false. Students will probably want to discuss why the answers do not concur with common sense.

4. a) H

   b) P

   c) C

   d) BP

   e) B

5. organisational; counselling; sports; organisational; counselling; developmental; forensic; clinical

Unit 2

7. The discussion would involve:

   - Observing the play of children at a Kindergarten.
   - Defining what the group means by physical aggression and giving examples of behaviours which constitute this.
   - After observing the behaviours of both sexes, deciding whether to propose a hypothesis which says boys are/or girls are/ more physically aggressive.
   - Designing a check sheet of specific behaviours to note and testing the hypothesis for stated periods of time (ie, an hour each day for two weeks).
   - Analysing the data to see how many physically aggressive acts were carried out.
   - Formulating a theory to reflect the findings.

8. The case study of a family member should be no more than one page and should not simply be biographical details but those events which have made an impact on the person's life. The case study could be constructed instead from the news clippings and could be a group effort if this is more appropriate.

9. Before being sent out of the classroom to make observations, students should be reminded of ethical considerations and the conventions of observing subjects. If this activity is too threatening they may like to observe members of their own class or just speak from experiences. The point of the exercise is to show the subjective nature of observations and the variety of interpretations which can be made.

10. The point in gathering specific observations is to show students how bias in interpretation can be removed. Making a histogram of the data can be a useful way of incorporating the practice of mathematical techniques and emphasising the scientific nature of such enquiries. It is advised to pool all the data into one graph so that a more complete picture of a sample can be discussed.

11. When constructing a survey it is wise to let the group discuss the types of questions and to ask, but ask them what they expect the answers may be. It is good to incorporate at least one **difficult** question so that during the analysis they can see the problems associated with framing the questions and quantifying the information into a result. This exercise takes a lot of time but is worth doing. Analysis of the problems is extremely useful as students usually have no idea of the complexity involved in this deceptively simple activity.

12. The idea of a **confounding** variable probably requires many anecdotal examples to allow students to form the concept comfortably.

13. a) **watching** the human is the independent variable which leads to **solving** which is the dependent variable.

    The fact that two of the non observer monkeys could solve the puzzle anyway means that perhaps **insight** or **prior experience** or even **chance** could be confounding or extraneous variables.

    b) The independent variable is supposedly meditation, and the dependent variable is the lowering of pulse. Relaxation, or simply lying down may have been the reason for the lowered pulse. It may even be that participants were tense before beginning the activity, which raised their pulses and as they relaxed, pulses returned to normal. The students who showed no difference in pulses could be interpreted as being unaffected by the activity.

Perhaps the one whose pulse was raised, found it stressful or had particular problems apart from the activity which raised the pulse. We could not say with any guarantees that the changes were due purely to the independent variable of meditation. There are too many confounding variables.

c) The soft music is the independent variable and sleep is the dependent variable. Although the music appeared to show no difference we cannot say that it definitely has no effect .

The confounding variables may be that the babies in the sample were deaf? We may need a larger sample, different music, or perhaps longer than one week to get used to the music. This hypothesis would need to be tested further, varying the conditions, before we accepted it.

14. Depression is a good topic to link the connections between thinking and the way we feel.

15. Guide the students through the activity on the board before performing the experiment. They could write up the experiment, learning to observe the scientific report writing conventions as they go under the following headings:

- Introduction *(define the problem)*
- Hypothesis *(make it operational)*
- Method *(describe the subjects, how they were chosen the method and the apparatus)*
- Results *(what result did we get expressed as a chart or graph)*
- Discussion *(theory, problems, solutions to try next time)*

Unit 3

16. The continuum would probably read in this order:

    death; coma; asleep; drunk; daydreaming; present state.

17. The teacher should emphasise how variations in consciousness affect behaviour.

18. Sleep needs will vary.

19. Newspaper articles may help to consolidate this concept.

20. Problems with sleeping.

21. Meditation exercise. There are many suitable tapes including 'Learning to Meditate' and 'Learning to Visualise' by Dr Petrea King. Most students manage to lower their pulse and this is often a good point to impress on them the value of relaxation therapy.

22. The visiting speaker could be organised by students in relation to Competency two which deals with planning and organising activities.

23. The research project can be useful in relation to working co-operatively, analysing and organising information, and using computers to research information.

Unit 4

25. The discussion should dispel the ideas of bad memory and instead draw from the students the fact that we usually remember what we consider to be important.

26. When you have made the list draw from the students questions about why we can't remember back to birth and why memory does not appear to function well until about 2-4 years. Why are those big events remembered?

34. Getting the students to organise the guest speaker or visit to a nursing home will be useful for helping them to attain competencies such as planning and organising activities, collecting, analysing and organising information.

35. Use the serial position chart handout on page 221; organise and total the correct number of scores.

36. Use the Imagery and Recall handout sheets on page 223; students to write their answers next to the cue word.

Unit 5

38. In a child's early days association with pleasure, food, pain, comfort are all learned relatively quickly. A toddler's associations with things around the house such as pets and routines they are engaged in are all typical

    Superstitious associations are the result of pairing a lucky or an unlucky happening with a particular item. This may have been due to experience or folk lore.

41. The debate is about the side effects of punishment and whether or not punishment works effectively.

42. This is again drawing attention to the negative effects of physical punishment.

46. The Transport Accident Commission are drawing attention to consequences of behaviour, using identification with role models and common occurrences and situations.

47. Some things you would learn by observation would be skills, and the consequences of behaviours such as punishment and reward.

Unit 6

48. In this activity we are looking for similarities in temperament and a genetic link for these characteristics.

56. Rogers self theory would explain anorexic behaviour in terms of the person's ideal self wanting to be thinner, the self image as being overweight and the real self as others see us as being underweight and risking health by starving.

57. Middle children could be striving to be better than an older sibling and trying to be more appealing than the baby of the family. They may become resentful or jealous of older and younger siblings to whom parents appear to pay more attention.

Unit 7

59. The Australian test of intelligence is designed to show how culture can affect the way people taking tests can be disadvantaged. The activity is reproduced from the book.

Scoring Sheet

The Original Australian Test of Intelligence

1. One, two, three, many — The **kuuk thaayorre** system of counting only goes to three — thono, kuthir, pinalam, mong, mong, mong, etc. The word **mong** is best translated as 'many' since it can mean any number between 4 and 9 or 10, after which **yuur mong** (many figures) would be more appropriate.

2. Those who say thirteen are right in European terms but irrelevant in Edward River terms. The speakers of **kuuk thaayorre** clearly recognise lunar mensuration and possess a notion of the lunar month calculated as the time between one phase of the moon and the next appearance of that particular phase. However, apart from having no specific word to designate thirteen and thirteen only — **yuurr mong** or 'very many', is the right answer — the annual cycle is couched in terms of environmental rhythms rather than in terms of fixed, invariant divisions of time. The 'year' then, is the time between the onset of one wet season and the onset of the next wet season — and wet seasons may early or late, so who can be precise?

3. The right answer is 'tree'. This stems from the **kuuk thaayorre** speakers early experience with tobacco, which was 'stick' tobacco, hence it is classified with tree.

4. Crocodiles, turtles, birds and frilled lizards are all classified as **minh** (which broadly might be translated as animals). Snakes along with eels are classified as **yak** which may be broadly translated as snake-like creatures.

5. All the items below are classified with sugar as belonging to the class of objects known as **may**. Broadly translated, **may** means vegetable food. Even witchetty grubs that are found in the roots of trees fall under this rubric — so does honey which is also associated with trees and hence fruit. The **kuuk thaayorre** language had no problem fitting flour into the **may** category since it obviously resembled some of their own processed vegetable foods eg — yams like **Dioscoria sativa elongata**. The word **may** can also mean sweet — and hence sugar, which of course does not resemble anything in their traditional culinary, also becomes **may**.

6. 'Eat' is the right word — well sort of, anyway. Where we make a distinction between 'eating' and 'drinking', **kuuk thaayorre** does not. They use the same verb to describe both functions, and why not?

7. The clues are easy for **kuuk thaayorre**. An avoidance taboo operates between mother's brother and sister's son, and politeness requires that sister's son should never directly face mother's brother nor talk to him directly in company. Sam and Ben are obviously brothers because of their unrestrained interaction, while Harry, with his back turned to **both** his uncles is obviously the respectful nephew.

8. Among the **kuuk thaayorre** God has been equated with a mythological character and he is definitely non-malevolent. Both fate and germs are concepts foreign to the **kuuk thaayorre** belief system. No-one dies without reason and suicide is unknown among them, so the right answer is **someone** — which is the case in this sorcery riddled society.

9. The small female wallaby is the right answer. Emu is a food that may be consumed only by very old people. Kangaroos (especially large ones) may not be eaten by parents or their children. The children will get sick otherwise. Everyone knows that — don't they?

10. Because some of them have to be avoided like the plague. For example, a male must avoid his father's sister's daughter, or anyone classified with her. Such relations are called **poison cousins** in Aborginal English.

Source: Hansfield, McCabe, Power and Smith., 1983, *Research Exercised for Introductory Psychology*., Harcourt, Brace, Jovanovich, Australia.

60. The connection being established here is between illness and the ability to think efficiently or the idea that not thinking regularly will diminish skills.

64. IQ tests are readily available from ACER or from self help books which show students how to approach standard IQ tasks and how to score the self test. A set of these in the class may be useful for this topic.

Unit 8

65. All of the answers are true of neonatal behaviour.

66. Modern research supports the idea that good quality childcare does no harm to children in child care centres. Bonding and attachment still take place with the primary caregiver with no ill effects.

68. The younger the child the more likely the behaviour will be egocentric but it may not be. Piaget's critics suggest that young children are not as egocentric as he supposed.

69. The longer line of buttons will be judged to have more buttons, the ball of plasticene will be called bigger and the tall thin glass will be judged bigger in the pre-operational stage of development.

Unit 9

72-74. These activities are exploring the prejudices about mental illness and, in particular, Schizophrenia.

75. The activity is meant to alert students as to the effect of anti depressive medication.

76. The following list of common phobias includes fear of:

    Astrophobia
    Arachnophobia
    Aviophobia
    Claustrophobia
    Hematophobia
    Microphobia
    Nyctophobia
    Pathophobia
    Pyrophobia
    Socialphobia
    Xenophobia
    Zoophobia

77. The film 'Sybill' is now quite old and somewhat difficult to hire from many video outlets. Although there are other films dealing with the topic, this is well worth finding.

78. It is sometimes difficult to equate the term 'anti-social' with the characteristics of this personality disorder as most people think that 'anti-social' means the inability to get along socially, which is not the case at all.

Answers to Check your Understanding

Unit 1

1.

		True	False
a)	Sigmund Freud practised the therapy of psychoanalysis.	☑	☐
b)	The four goals of psychology are to describe, understand, predict and control behaviour.	☑	☐
c)	Psychology is a very old science.	☐	☑
d)	Animal ethics state that animals can suffer any pain as long as humans can benefit.	☐	☑
e)	Wilhelm Wundt was a Behaviorist.	☐	☑
f)	The Humanistic approach was made popular by Carl Jung.	☐	☑
g)	Some psychologists work in psychiatric institutions with psychiatrists.	☑	☐
h)	The Cognitive school of psychology is connected with thinking, learning and memory.	☑	☐

2. Freud said that most behaviour was motivated by either of two life forces, sex and aggression. (Thanatos — death and libido — life.)

3. Animals are used because they are cost effective, breed quickly, have similar biological systems and brains.

4. Psychologists have ethics to protect clients or subjects from malpractice and to uphold psychology as a reliable and credible science.

5. bystander apathy

6. breed

7. Gestalt

8. Biopsychological

9. eclectic

10. experimental

11. psychiatrist

Unit 2

1.

		True	False
a)	The scientific method is based on empirical research.	☑	☐
b)	We either prove or disprove a hypothesis in any experiment.	☐	☑
c)	A case study is used to test a group of people.	☐	☑
d)	A Theory is proposed on the basis of facts which are established by the scientific method.	☑	☐
e)	Observations are the best way to gather data without errors.	☐	☑
f)	Naturalistic observations are carried out in a laboratory.	☐	☑
g)	Surveys are easy to construct and yield reliable information.	☐	☑
h)	Experiments are the most scientific way to gather data.	☑	☐

2. Independent variables are those factors which cause a change to occur in behaviour. Dependent variables are the changes which occur as a result of the effect of the independent variable. Confounding variables are those which alter the result but have not been expected to occur.

3. Some of the disadvantages in observations are the bias which the observer brings and the way in which the observer affects the behaviour of those being watched. All behaviour is subject to a variety of interpretations by observers and those being observed can disguise their behaviour.

4. Chance alone can make things happen and we have to account for it when we draw conclusions about experiments. At least 5% of things will happen due to chance and not due to the effects of the independent variable we think is responsible.

5. independent / dependent

6. experimental/ control

7. placebo

8. subject/experimenter

9. empirical

10. ethics

11. experimenter

Unit 3

1.		True	False
a)	Conscious awareness varies according to the state you are in.	☑	☐
b)	Sleep is a state of consciousness which operates at a very low level.	☑	☐
c)	The deepest sleep is in stage three.	☐	☑
d)	The time when we sleepwalk or sleeptalk is in stage one.	☐	☑
e)	We dream in rapid eye movement sleep.	☑	☐
f)	Night Terrors are the same as nightmares.	☐	☑
g)	Not everyone is capable of being hypnotised.	☑	☐
h)	Some drugs produce visual hallucinations.	☑	☐

2. Describe one drug from their research information.
3. The four sleep stages are:
   - Light sleep, dozing, different brain waves, heart and breathing slow down.
   - Real sleep and spindles appear.
   - Deep sleep with some Delta waves, hard to rouse, body slows.
   - Deepest sleep, with Delta waves sleep walking and talking and night terrors.
4. Hypnosis is a deeply relaxed state of conscious awareness whereby we are more suggestive and less inhibited than normal.
5. alert
6. disinhibited
7. meditation
8. insomnia

9. nightmares
10. barbiturates
11. narcotics

Unit 4

1.

		True	False
a)	Recall is more sensitive than recognition.	☐	☑
b)	Selective Attention is needed to focus on the important things we want to remember.	☑	☐
c)	A digit span test measures how much is stored in long term memory.	☐	☑
d)	Episodic memories are biographical details of our lives.	☑	☐
e)	Cues prompt information contained in Short term memory.	☐	☑
f)	Repression was Freud's term for motivated forgetting.	☑	☐
g)	Alcohol and drugs can interrupt memory storage.	☑	☐
h)	Sensory memory can hold seven chunks of information.	☐	☑
i)	Long term memory has an almost limitless capacity.	☑	☐
j)	Interference causes us to forget.	☑	☐

2. Short term memory is limited in capacity 7+ -2 items, stores information acoustically or visually, is easily disrupted, can retrieve verbatim, is the place for thinking, holds information for 18 seconds, needs rehearsal to maintain the information.

3. Semantic memory stores meaning without exact information being needed such as in the story line of a movie. This enables us to store far more information than verbatim memory.

4. Procedural memories are how to do things and these are relatively permanent compared with other types of memories.

5. short term memory

6. recognition/recall

7. relearning

8. attention

9. serial position

10.mnemonic

Unit 5

1.

		True	False
a)	Pavlov conditioned his dogs to salivate when they heard the bell.	☐	☑
b)	A reinforcer is applied after you have responded to a stimulus.	☑	☐
c)	A Skinner box punishes an animal when it makes an incorrect response.	☐	☑
d)	Phobias are the result of operant conditioning.	☐	☑
e)	Positive reinforcers are much the same as rewards.	☑	☐
f)	Smacking is the most effective form of child punishment.	☐	☑
g)	Children learn only positive behaviours from role models.	☐	☑
h)	Latent learning is not obvious to an observer.	☑	☐

2. Classical conditioning is the simplest form of association learning, ie When this happens so does that. Operant conditioning is when a response is followed by a consequence.

3. You could use punishment or role modelling or positive reinforcement for the desired behaviour.

4. Watching a role model who is not frightened of dogs handle a dog without problems is the best way of showing someone that there are no bad consequences as long as you handle the animal with care. Encouraging the scared child to touch and get closer and to imitate the role model is successful at overcoming fears. Rewarding the scared child for overcoming fears is also advantageous.

5. classical

6. classical

7. reinforcers

8. positive reinforcers

9. punishment
10. role model
11. observational

Unit 5

1.

		True	False
a)	Personality is an enduring set of characteristics which are relatively stable throughout life.	☑	☐
b)	Sheldon's body type theory suggested that ectomorphs were fat and jolly.	☐	☑
c)	Jung's theory of personality suggested that people were either extroverts or introverts.	☑	☐
d)	Cardinal traits are found in most people according to Allport.	☐	☑
e)	According to Carl Rogers people always see you the same way you see yourself.	☐	☑
f)	Freud suggested that personality was influenced by childhood experiences.	☑	☐
g)	Super-ego is like a judge who weighs up the moral issues in our actions.	☑	☐
h)	Adults who are fixated in one of Freud's psycho sexual stages, are likely to show behaviours which resemble childhood stages.	☑	☐

2. Id drives behaviour by motivating it through either sex or aggression, Ego, obeying the reality principle, decides when, where and what is appropriate behaviour and Superego balances the actions of the two and makes moral judgements about what is good for the organism and society as a whole.

3. Social learning says that personality is the result of situations and the rewards and punishments we experience as consequences of our behaviour as we grow up.

4. Being the oldest, middle or youngest can affect the sibling behaviour as none of them know how the other one perceives the world. Parents treat them differently as each child who is a unique person changes parent behaviour as well.

5. Ideal

6. congruent

7. birth order
8. phallic
9. secondary
10. extroverts
11. mesomorphs
12. melancholic

Unit 7

1.

		True	False
a)	Intelligence tests can be culturally biased.	☑	☐
b)	People can learn to be more intelligent as they grow older.	☑	☐
c)	Children as low as 4 can be tested accurately for intelligence.	☐	☑
d)	The mean score for intelligence is around 50.	☐	☑
e)	Geniuses are often found to be insane.	☐	☑
f)	Identical twins always show similar IQ results when they have been raised together.	☑	☐
g)	All people with very high IQ scores are well adjusted and have powerful jobs.	☐	☑
h)	Gardner says that there are seven intelligences.	☑	☐

2. Intelligence is the global capacity to act purposefully and think rationally and to deal effectively with the environment.

3. The experts think that abstract thinking or reasoning, problem solving ability, the capacity to acquire knowledge, memory and the adaptation to one's environment are all involved with intelligence.

4. A gifted child usually seeks out adult company, is able to absorb information rapidly, can solve problems at an early age, is a fluent and capable early talker, may show early talent in music, art or maths, is an early reader often self taught and shows early co-operative behaviour with empathy for others.

5. unfair or biased

6. parents

7. intra-personal

8. 100

9. bell

10. thinking

11. superior intelligence

12. longitudinal

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Unit 8

1.

		True	False
a)	Neonates have a variety of reflexes for survival.	☑	☐
b)	Children learn to sit, crawl and walk at the same age.	☐	☑
c)	Bilingual children have more trouble learning the second language than the first.	☐	☑
d)	Separation anxiety is shown when children are not securely attached.	☐	☑
e)	Attachments can only be formed with the mother.	☐	☑
f)	Harlow showed that the cloth monkey substitute gave the monkeys more comfort than the wire mother substitute.	☑	☐
g)	In the pre-operational stage children cannot understand abstract thinking.	☑	☐
h)	Identity versus isolation is connected to adolescence in Erikson's view.	☑	☐

2. Those reaching the end of their life can look back with pride and pleasure at a life which has been fulfilling or at a life which has been unsatisfying and meaningless which causes them to despair of their aging process.

3. A neonate has the ability to taste quite well, see but not in depth or in colour, hear and discriminate between voices, grasp objects firmly, feel pain and have reflexive behaviours for protection.

4. Harlow's socially deprived monkeys were socially inadequate in every way and never regained normal behaviour even after joining the other monkeys.

5. identity/role confusion

6. one

7. child

8. sensory-motor

9. permanence
10. egocentric
11. concrete operational
12. abstract

Resources and Key Terms

Unit 1

This unit looks at the history of Psychology, ethics, the use of animals, psychological approaches, and careers in psychology.

Relevant Reading

- Coon, D. 'Introduction to Psychology' 7th ed.

  Chapter 1, *'Psychology; The Search for Understanding'* pages 1–32.

  Appendix A *'Careers in Psychology'*

The appendix can provide some useful data but beware that American guidelines are somewhat different to Australian in regard to educational requirements. The Australian Psychological Association is the best group to contact for information regarding qualifications and registration requirements for a career in psychology.

Video Resources

- No 2. 'What is Psychology?' 1990 Coast telecourses U.S. Educational Media Aust.
- 'The Clinical Psychologist'. Introduction to Psychology, Open University 1991.

Key Terms

- ethics
- psychodynamic
- behaviorist
- humanist
- biopsychological
- cognitive
- neuropsychology

Unit 2

This unit looks at the various research methods used to gather information or data in psychology.

Relevant Reading

- Coon, D. 'Introduction to Psychology', 7th ed.

  Chapter 2, 'Research Methods and Critical Thinking', pages 33–54.

Where possible the students should be actively engaged in gathering data and analysing the information so that they can learn through this involvement. The activities in this chapter are important for this reason.

Film Resources

- 'Genie the Wild Child' was shown on television early in 1996 and may be available from some TAFE libraries.
- No 2 .'Research Methods', Coast Telecourses. U.S. Educational Media Australia.
- No 2 .'Understanding Research', Discovering Psychology.
- 'Two Research Styles', Introduction to Psychology, Open University 1991.

Key Terms

- empirical
- hypothesis
- support/ refute
- theory
- case study
- observation
- observer effects
- observer bias
- survey
- experiment
- random sample
- stratified sample
- population
- independent variable
- dependent variable

- confounding variable
- chance
- experimental group
- control group
- placebo effect
- subject effects
- experimenter effects
- conclusions
- generalisations
- replication

Unit 3

This unit looks at consciousness and the variations which we experience daily. The teacher may like to be aware of community resources such as Government agencies who will be available to visit as speakers on topics such as drugs and hypnosis.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th Edition
  Chapter 6, 'States of Consciousness', pages 155-193.

Video Resources

- 'Sleep and Dreaming', Coast Telecourses, U.S. Educational Media Australia.
- 'The Mind Awake and Asleep', Discovering Psychology.
- 'The Addicted Brain', Frontiers of the Mind, CS and Assoc. US, 1987.
- 'The Psychology of Addiction', Introduction to Psychology, Open University, 1991.

Key Terms

- conscious awareness
- unconscious
- sleepwalking
- sleeptalking
- night terrors
- rapid eye movement
- nightmares

- insomnia
- hypnosis
- disinhibited
- meditation
- hallucination
- amphetamines
- barbiturates
- sedatives
- euphoria
- anaesthetic
- narcotics
- addiction

Unit 4

This unit looks at the way memory works, what makes us forget and how to improve memory.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.

  Chapter 8, 'Memory', pages 234-265.
- The Penguin book, 'Your Memory; A User's Guide' by Alan Baddeley (1983) is also a very detailed and useful text from which many of the activities were adapted.

Video Materials

- No 8 'Memory', Coast Telecourses, US, Educational Media Australia.
- No 9 'Remembering and Forgetting', Discovering Psychology.
- 'Memory; Fabric of the Mind', Frontier of the Mind,. Educational Media Australia.
- 'Memory. The Past Imperfect', CBC, Canada, David Suzuki, 1993.

Key Terms

- sensory memory
- short term memory

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- long term memory
- selective attention
- chunks
- episodic memories
- procedural memories
- recall
- recognition
- relearning
- semantic
- verbatim
- habituate
- cues
- context
- state
- interference
- repression
- serial position effect

Serial Position Effect

	Total Number Correct
cup	
ball	
man	
ring	
sheep	
button	
dog	
flower	
bed	
gate	
hill	

snail	
bat	
chair	
cat	

Which words were worst remembered and which best?

Imagery and Recall

Repetition List		Imagery List	
practice ________________	_____	drum ________________	_____
beauty ________________	_____	tent ________________	_____
weight ________________	_____	spade ________________	_____
love ________________	_____	apple ________________	_____
study ________________	_____	ring ________________	_____
hard ________________	_____	tree ________________	_____
time ________________	_____	slipper ________________	_____
mood ________________	_____	glass ________________	_____
last ________________	_____	balloon ________________	_____
final ________________	_____	cake ________________	_____
Total correct	/10	Total correct	/10

Unit 5

This unit looks at the history of learning theory, classical and operant conditioning, punishment and cognitive learning.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.

  Chapter 7, 'Conditioning and Learning', pages 194-233.

Video Resources

- No 7, 'Learning', Educational Media Australia.
- No 8, 'Learning', Discovering Psychology.

Key Terms

- classical conditioning
- association
- phobias
- reinforcers
- operant conditioning
- positive reinforcers
- punishment
- observational learning
- role models
- latent learning
- discovery learning

Unit 6

This unit explores various theories of personality from the Greeks to modern day. It looks briefly at tests and how we measure personality.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.
- Chapter 15, '*Personality*', pages 474-510.

Video Resources

- No 14 'Personality', Coast Telecourses, Educational Media Australia.
- No 15 'The Self', Discovering Psychology, 1989.
- 'The Young Freud'. Shown on SBS 8/5/96.

Key Terms

- character
- temperament
- humors
- phrenology
- traits
- types
- introverts
- extroverts
- cardinal traits
- central traits
- secondary traits
- Id
- Ego
- Superego
- Oedipus complex
- Electra complex
- fixated
- penis envy
- self image
- real self

- ideal self
- incongruent
- congruent
- positive self regard

Unit 7

This unit explores the theories and how we define and measure intelligence.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.

  Chapter 14 '*Intelligence*', pages 449-473.

Video Resources

- No 16. 'Testing and Intelligence', Discovering Psychology.
- No 15. 'Intelligence', Coast Telecourses, Educational Media Australia.

Key Terms

- Intelligence Quotient
- culturally fair tests
- aptitude
- longitudinal
- heredity
- environment
- Savant syndrome

Unit 8

This unit explores the various developmental theories of motor development, attachment theory, social development, cognitive development and psycho-social theory.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.

  Chapter 12, '*Child Development*', pages 373-412.

  Chapter 13, '*From Birth to Death; Lifespan Development*', pages 413-416.

Video Resources

- 'The Developing Child', Discovering Psychology.
- 'Children Thinking' (Piaget's conservation exercises), University of Sydney TV Service. Video Classroom. 90 mins.
- 'Human Development; The first 2-6 years' (Three titles.) Cognitive, Language and Psycho-Social Encyclopaedia Brittanica.
- 'Child's Play' Introduction to Psychology. Open University. 1991. (Piaget).

Key Terms

- neonates
- reflexes
- attachment
- separation anxiety
- primary caregivers
- socialization
- cognitive development
- object permanence
- egocentric
- state
- conservation
- psychosocial

Unit 9

This unit explores the nature and definition of mental illness and some of the major categories of illnesses and their symptoms.

Relevant Reading

- Coon, D, 'Introduction to Psychology', 7th edition.

  Chapter 16, '*Abnormal Behaviour; Deviance and Disorder*', pages 511-537.

  Chapter 17, '*Major Mental Disorders*', pages 538-566.

Video Resources

Many major films have added to the fear of mental illness by presenting a view of therapy as archaic and cruel. It would probably not be wise to show films of this genre if we are trying to present a positive view of illness and therapy. Both films recommended below* are adult in nature and portray some scenes which may offend some students. It is therefore recommended to explain the nature of them before showing to the class.

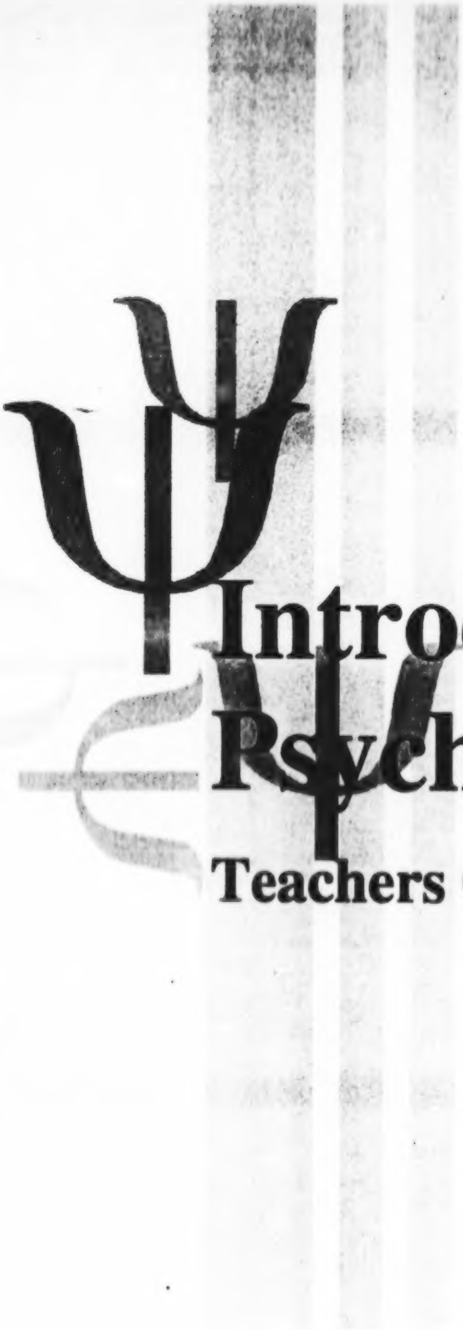
- * 'Sybil', 1976, CBS Fox Video. 198 minutes. Made for TV movie.
- * 'Angel Baby', 1994. VHS Southern Star.
- No 21 'Psychotic Disorders', Coast Telecourses, Educational Media Australia.
- No 21 'Psychopathology', Discovering Psychology.

Key Terms

- psychotic
- delusions
- hallucinations
- manic
- depressive
- bi-polar
- generalized anxiety
- panic disorder
- agoraphobia
- obsessive- compulsive

- multiple personality disorder
- fugue
- paedophilia
- hypochondria
- dependent
- histrionic
- Narcissistic
- anti-social
- schizoid
- borderline
- paranoid

Notes



Introduction to Psychology

Teachers Guide

Adult Education in
the Community

Gordon Institute
of TAFE

CG028597

Introduction

'Introduction to Psychology' has been designed for students who are interested in finding out about Psychology as a field of study. This module introduces a wide variety of topics and activities designed to capture imagination and interest and involve the student, albeit fairly superficially, in research, experimentation and discussion about Psychological theory and issues of interest.

In recent times, Psychology as a study, has grown in popularity and is one of the fastest growing studies in VCE. Most people find its subject matter of great interest and the applications of Psychological theory are far reaching and useful to any profession which deals with people. Thus, it is often chosen to complement other studies such as Management, Teaching, Nursing, Science, Welfare to name but a few.

With this in mind, many students will find this introduction useful prior to returning to study, taking up a place at a tertiary institution or merely to enhance their understanding of others in the workplace. The content alone is of great interest, even if no further studies are intended.

To successfully deliver this unit it is recommended that the teacher has a major in Psychology as well as an interest in current Psychological issues. The teacher must be aware of current Psychological guidelines which protect students from unethical practice in the classroom and those which relate to confidentiality.

The current VCE Psychology syllabus provides a summary of ethical classroom practice for those who are not familiar with professional guidelines.

For the teacher's own background information it is recommended that a general text is available such as Dennis Coon's 'Introduction to Psychology' 7th edition, West Publishing, USA. This text has been used in the production of this module as it is readily available, widely used in Australia and very reader friendly. In addition, there is a variety of support materials available such as coloured overheads of many diagrams in the book. There is no need for students to have a copy of this text as the course is self-supported with information but should they wish to purchase a text, this is appropriate for the level.

There are many useful video resources available for introductory courses such as this and some have been quoted. It is also useful to be aware of the variety of community resources such as Government and private agencies which can support the topics. Excursions to a variety of local institutions can help students see the application of Psychological theory in real life.

The course is nominally written for 40 hours but does not have to be covered in its entirety. It is suggested that both initial units are taught, to set up Psychology as a scientific study, and that others are chosen on the basis of their interest and relevance to student needs. Notional hours for full delivery are given at the commencement of each chapter but teachers may choose either to deliver in depth or skim over the topic. There is more material in the whole module than can be covered in the time allowed.

In conclusion, it is hoped that teachers and students will gain enjoyment and valuable insights into Psychology as a result of their participation in this introductory module. Perhaps it may inspire further study into this vast and fascinating science of human behaviour

Lesley Edwards
Gordon Institute of TAFE
Geelong

Links with the key competencies in Level IV

This module has been designed to be used in the Certificate of General Education for Adults under the General Curriculum Options levels 3-4.

The activities associated with this module have been developed with the Key Competencies in mind so that student will come to understand the content of this introduction to a new area of expertise through a wide variety of activities, and assessment tasks.

The competencies are listed below with examples which illustrate how the activities are based around the key competencies.

1. Can collect, analyse and organise information

Some of the activities will include library research, collecting newspaper clippings, reading from texts, discussion in groups, locating appropriate speakers or films, note taking, drawing diagrams and graphs, asking questions and analysing information.

2. Can plan and organise activities

Activities will include, planning surveys, excursions and class experiments, evaluating the information gained from these activities, working to a time frame.

3. Can communicate ideas and information

Activities will include, speaking to the class and within a group, writing about topics of interest, using graphs and diagrams where appropriate, editing and revising written materials, using noticeboard displays to communicate to others for class talks.

4. Can work with others and in teams

Activities will include working in pairs and groups, accepting opposing viewpoints and differing life and cultural experiences, being assertive and resolving conflict in the group, working to a deadline, negotiating, collaborating and act an outcome as a group.

5. Can use mathematical ideas and techniques

Activities will include problem solving, using statistical analysis, drawing of graphs and diagram, calculating, estimating, measuring , interpreting and evaluating .

6. Can solve problems

Activities will include defining and understanding the problem and setting up an experiment to collect data, analysing the data and posing possible solutions or interpretations, identifying faults in the data collection or analysis and evaluating the results.

7. Can use technology

Activities will include using a computer as a research tool and to write materials.

8. Can identify, analyse and apply the practices of culture

Activities will highlight the need for respect for individual rights and responsibilities, personal and religious value systems and how these affect someone's perspective of behaviour.

Video Resources

There are many suppliers of useful video resources available for purchase at reasonable rates, some of which are mentioned below. They provide useful catalogues which group the videos under the headings *Psychology* or sometimes *Science / Health*. Many are available for preview.

The National TAFE Resource Centre at Barton TAFE is an excellent 'Off Air' resource (ie those which have previously been shown on television).

Ask at your library for a catalogue for one of the following:

VIDEO EDUCATION AUSTRALIA
EDUCATIONAL MEDIA AUSTRALIA
MARCOM PROJECTS
VIDEO CLASSROOM
NATIONAL TAFE RESOURCE CENTRE (BARTON TAFE)

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ARIS — Adult Education Resource and Information Service, Language Australia. ARIS is funded by the Adult, Community and Further Education Board of Victoria.